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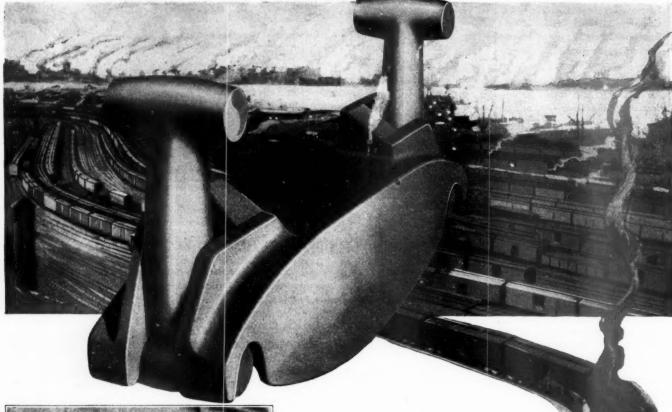
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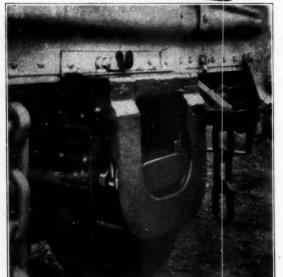
No. 2

# In This Issue

Co-Ordination of Transportation Agencies Recommended Page	14
An abstract of the comprehensive proposals for co-ordination and regulation of transportation agencies submitted to the Interstate Commerce Commission by	
Attorney-Examiner Leo J. Flynn.	
Number of Defective Locomotives Continues to Decline	81
An abstract of the twentieth annual report to the I. C. C. of the Bureau of Locomotive Inspection, showing that of the locomotives inspected only 10 per cent were found defective.	
,	
The Railroads are Still Huge Spenders	86
An analysis of 1931 purchases of fuel, materials and supplies by Class I rail-roads of the United States, which shows that in that year the roads spent a total of more than \$863,000,000.	
EDITORIALS	
Competition Between Railways	71
Specialists Needed to Solve Coordination Problem	72
Trend of Public Opinion	73
GENERAL ARTICLES	
Co-Ordination of Transportation Agencies Recommended	74
I. C. C. Reversed in Western Grain Rate Case	79
Number of Defective Locomotives Continues to Decline	81
Raise 3330-Ton Bascule Span 11½ Ft	83
R. B. A. Urges Loans For Railroad Improvements	85
The Railroads are Still Huge Spenders	86
Lyman Delano Elected Chairman of Atlantic Coast Line	89
Freight Car Loading	90
Four-System Plan Hearings	91
NEWS	93
REVENUES AND EXPENSES OF RAILWAYS	105

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### RAILWAY AGE

# Competition Between Railways

There is much significance in an article by Thomas F. Woodlock which appeared recently in the Wall Street Journal, and in an address which was delivered by Commissioner Joseph B. Eastman before the American Economic Association at Washington, D. C., on December 30, in which they dealt with competition in transportation, both between the railways themselves and between them and other carriers. Mr. Woodlock was a member of the Interstate Commerce Commission during the five years 1925-1930, and Mr. Eastman is generally recognized as at present its most influential member. What they said about competition between the railways is, therefore, too important to be disregarded by railway executives.

Mr. Woodlock summarized and emphasized certain remarks made by the commission in its opinion in the 15 per cent case and in its annual report for 1931. Railroad management, the commission said, can do much to help itself. Pooling of competitive passenger service, and attacks by the railroads on their own initiative upon various other forms of wasteful competition, were suggested. "The traffic pressure which large shippers strategically located are in a position to exert upon the railroads," said the commission, "is so great that the reduction of competitive wastes by the carriers upon their own initiative is surrounded by great practical difficulties," and it may be that "a comprehensive investigation adequately financed and directed by Congress may at length prove desirable." Such reduction of waste, the commission indicated, is in entire harmony with the spirit of the Transportation act. This matter of reduction of wasteful competition, in the opinion of Mr. Woodlock, "is one which should receive swift and earnest consideration from the railroad managers," and in weighing his intimation that such consideration is necessary in order to deprive the commission of ground for withholding help which the carriers seek from it, the fact should not be disregarded that he knows sentiment within the com-

#### Mr. Eastman on Railway Competition

Mr. Eastman, in his address, pointed out that railway regulation originally "was directed quite as much against evils resulting from (railway) competition as against evils resulting from monopoly," and that "keen competition between railroads still exists, and it exercises an adverse effect on aggregate earnings through both service and rates." "In the case of rates," he said, "the ability of large shippers located at traffic centers to shift traffic from one rival route to another, popularly known as the 'traffic club,' leads at times to unwarranted reductions, but more often to a timidity in initiating increases which are capable of justification. \* \* \* The thought suggests itself that the rapidly growing competition from outside sources furnishes a complete reason which has not hitherto existed for some abatement of competition within the railroad industry, that is to say, for a greater degree of co-operation on the part of railroad managements which will reduce competitive wastes in service and thus lower costs materially, and also reduce timidity in dealing with various rates."

#### Competition and the Law

It is difficult to say just how much competition between the railroads is contemplated and required by existing federal laws, and how much of such competition the public wants. The Transportation act of 1920 modified the anti-trust act as applied to railroads, and also the anti-pooling provisions of the Interstate Commerce act. It unquestionably legalized pooling of service, traffic and earnings of parallel and competing lines which previously had been prohibited. It went further, and authorized consolidations which previously would have been held unlawful. Nevertheless, the Transportation act plainly contemplated and required much competition between railroads. Even in directing the commission to prepare a plan of consolidations it required that "competition shall be preserved as fully as possible." Certain provisions of the Clayton anti-trust act, which was passed subsequently, prohibit competing railways from having common directors, the obvious purpose being to prevent restriction of competition.

"The ability of large shippers located at traffic centers to shift traffic from one rival route to another" which, as Mr. Eastman said, "leads, at times, to un-

warranted reductions (of rates) but more often to a timidity in initiating increases which are capable of justification," is also used effectively for other purposes. It is the most effective weapon used to get the railways to favor big shippers in making purchases. No law could deprive the shipper of the power to select the initial carrier of his freight; but his power to route it beyond the initial carrier was first given him by the Hepburn act in 1906. The provision then enacted is still in effect, and its obvious purpose was and is to enable the shipper to stimulate competition for his business between rival railways. Why has not the commission proposed that Congress shall repeal this provision? A large part of all the costly concessions in service and rates, and of other bad competitive practices of the railways which the commission criticises, are due to "shipper terrorism" which could be greatly reduced by the simple expedient of depriving the shipper of the power to route his freight beyond the initial carrier. With a significant inconsistency, the same law that denies the initial carrier the power to route freight beyond its own lines makes it liable for loss and damage incurred on any line over which the freight moves.

The railroads must consider not only the law but also public sentiment, as well as the views of the commission, in regard to competition, and unquestionably the commission is urging a greater reduction of competition than existing law contemplates and authorizes or than public sentiment favors. There is too much competition and waste in passenger service under present conditions; but is the public really in favor of reducing them? The greatest obstacle to their reduction is the realization of railway officers that the railroad that runs the best and most passenger trains between important terminals usually gets the bulk of the business. Furthermore, most of the losses being incurred in passenger service are due to the operation of unprofitable local trains that the local public invariably objects to being taken off.

#### What the Shippers Want

There can be no question whatever regarding the sentiment of most shippers, and especially of their traffic managers, regarding competition for freight business. They want it. They criticize the railways for indulging in it to excess; but at the same time most of them use their power to divert traffic from one railway to another to get advantages in purchasing, service and rates, which cost the railways large amounts. The commission condemns the railways for yielding to this pressure, but what has it or any other government agency actually done to reduce it or strengthen the position of the railways in resisting it? The commission exhorts the railways not to yield to it, but it is to the railroads and not to the commission that the pressure is applied. It is this individual railroad or that individual railroad, and not the commission, that loses traffic and earnings if it incurs the resentment and brings down on its head the traffic club of

the shipper. The commission has been and can be in future very helpful by investigating and exposing harmful practices resulting from traffic pressure, but relief from such pressure will be only sporadic and temporary as long as legislation such as that regarding the routing of freight empowers shippers to apply it.

Nevertheless, Commissioner Eastman was right in saying that there is "a compelling reason which has not hitherto existed for some abatement of competition within the railroad industry, that is to say, for a greater degree of co-operation on the part of railroad managements which will reduce competitive wastes in service and thus lower costs materially, and also reduce timidity in dealing with various rates," and that it is "a peculiarly appropriate time for the railroads to abate civil strife and unite in common offense against the enemy at the gate." The "compelling reason" to which Mr. Eastman particularly referred is the competition from outside sources, and this alone is sufficient to justify adoption of the policy that he urged. There is another equally compelling reason which is implied by what Mr. Woodlock has said, This is that the commission constantly uses excessive railway competition and its results as a reason for not granting changes in rates for which the railways ask; and better co-operation between them would not only directly increase their net earnings, but would also deprive the commission of a reason often given by it for not performing its own duty.

The conditions arising from excessive competition between the railroads are only a part of the railroad problem; but they are a part of it, and an important part. In attempting to deal with that part of the problem effectively the railways will meet with powerful opposition from shippers and communities, but if they grapple with it courageously and vigorously they will accomplish a good deal, and they will also show what cannot be accomplished in that way. What they show cannot be accomplished because of opposition from shippers and the public may be as important as what they show can be accomplished.

# Specialists Needed to Solve Coordination Problem

"Our slowness in adapting the motor truck and bus to railroad service and in perfecting a container which will move with ease between road and rail is due entirely to the fact that the job of making these innovations, and of the studies which must precede them, is left entirely to officers who already have duties which require practically all their time. The only time we have to study and make changes in railroad service to meet modern competitive conditions is in the evening and on Sundays and holidays."—
Thus a railroad officer who, in spite of his modesty

RAILWAY AGE

regarding railroad accomplishment in the field of motor transport, nevertheless, in addition to his manifold railroad duties, conducts a very successful and expanding highway subsidiary.

Is there not a great deal of truth in his contention? Bolstering it further, he tells of highway services which have only recently been installed which might with great profit have been inaugurated several years ago only for the fact that "we did not have time to get around to it."

The greater freedom to experiment with new devices and new rates which is now possible because of the more liberal attitude of the Interstate Commerce Commission, the rapidity with which new ideas for demountable containers are appearing, the inroads of competitors—all these point to the possibility and advisability of developing true rail-highway co-ordination at a much more rapid rate than that which has heretofore obtained. Satisfactory progress in this direction requires careful study and planning by competent men who can devote their entire time to the work, without interference from managerial duties which are onerous enough in themselves.

#### Managerial Tasks Leave Little Time for Research

"There are dozens of situations on this railroad," our informant continues, "where we have reason to suspect large economies could be effected by the use of motor vehicles. There are other cases where mixed freight carload rates might retrieve a lot of business for us which is now moving by trucks. There are instances which come up every day of losses of business which we might avert by certain adjustments in our service, which adjustments, however, we cannot make without thorough study. There are several new containers which we should like to look into. Then there is the whole complex matter of store-door delivery, about which we know next to nothing. And the solution of these problems is left to officers, or to committees of officers, to handle in the time which they can spare from their managerial tasks."

Some railroads, it is true, do relieve officers assigned to such studies from some of their other duties. But it may be questioned whether in more than a few isolated cases the personnel is in any way commensurate with the pressing nature of the problem, and the rapidity of its growth. Certainly for dealing with a flexible competitor such as the motor vehicle, which can be brought into action against any vulnerable point on the railroad by the quick decision of a single individual, a slow-acting committee is a pretty clumsy weapon of defense; as a weapon of offence it usually does not act at all.

Would not a responsible staff officer charged with the sole duty of finding ways and means for the profitable adaptation of railway service to meet modern competitive conditions, and who would stand or fall entirely on his record of accomplishment on this task alone, be the surest means of coping successfully with this problem?

# Trend of Public Opinion

Evidence is accumulating of a vast and growing public demand for relief for the railroads from the onerous conditions from without which are threatening their financial status and continued satisfactory service to the public. Leaders in public life, in finance and industry and influential newspapers are directing the attention of the people to this problem, upon the solution of which depends not only the vital service of transportation but the whole credit structure of the nation as well. Both the President and the Interstate Commerce Commission have made recommendations designed to relieve the railroads in the present emergency and looking toward a solution of some of their difficulties which lie deeper than the depression.

Such favorable public opinion is gratifying, and it is also absolutely necessary, since remedial action depends largely upon wise legislation, and such legislation will come only when an enlightened and determined public opinion insists upon it. Those who have at heart the welfare of the railroads and the maintenance of an adequate and efficient national transportation system should exert every effort to crystalize this

favorable opinion into action.

The emergency measures proposed for railroad relief during the current year, it goes without saying, deserve general support. It must not, however, be overlooked that the railroad problem goes far deeper than the present depression. The relatively greater decline in the market value of railroad securities as compared with others proves that. The public opinion favorable to the railroads should not be appeased, therefore, with measures which deal only with the difficulties incident to the depression. It must go further and insist on a solution of the fundamental problems for which the depression can in no wise be blamed

The report of Examiner Flynn on the co-ordination of railway and highway transport, recommending thoroughgoing regulation of interstate motor carriers, will be the subject of further proceedings before it can be passed upon finally by the Interstate Commerce Commission and be made the basis of recommendations to Congress. There are portions of the report, however, with which the Commission has already expressed its agreement and upon which action can be taken without further delay. One of these certainly is the recommendation that an impartial study be undertaken to determine the adequacy of present taxation of commercial motor vehicles. This is an investigation which is urgently needed and which must be preliminary to any comprehensive treatment of the problems arising from the development of highway transportation. There is every reason why every taxpayer, every private motorist, every savings bank depositor, every insurance policy holder and every railroad employee should urge immediate action by Congress upon this proposal, as well as upon that for a general investigation of all forms of transport.

# Co-Ordination of Transportation Agencies Recommended

Attorney-Examiner L. J. Flynn submits comprehensive proposals for regulation to I. C. C.

WASHINGTON, D. C.

ECLARING that "the national transportation machine cannot function with progressive efficiency, part regulated, part unregulated", and that "co-ordination of transportation agencies cannot reach its economic possibilities under this anomalous condition", Attorney-Examiner Leo J. Flynn of the Interstate Commerce Commission has submitted to the commission a voluminous report on the commission's investigation of Co-Ordination of Motor Transportation, No. 23,400 on the commission's docket, including comprehensive recommendations for legislation specifically authorizing railroads to engage in motor transportation and providing for federal regulation of interstate motor transportation in general.

The report, made public on January 5, is summarized in a statement of 50 conclusions, of which the above quotation is the first, containing the recommendations for specific treatment of the different classes of motor carriers, including the regulation of motor operations carried on by the railroads. Oral argument on the recommendations will be heard by the commission at Washington on March 1, 2, and 3, and exceptions to the report are to be filed by February 9 and replies

by February 26.

Whereas the commission's earlier investigation of motor transportation by itself resulted in a report including recommendations for the regulation of passenger transportation, the present report proposes the extension of regulation and supervision to freight carriers, including contract carriers, as to which the commission would be authorized to fix minimum rates. The full text of the conclusions follows:

#### Conclusions

"1. The national transportation machine cannot function with progressive efficiency, part regulated, part unregulated; co-ordination of transportation agencies cannot reach its economic possibilities under this anomalous condition.

"2. The past ten years have been an era of changing methods of distribution, of merchandising, and of business practices; transportation by motor vehicle being one of the greatest contributing factors to these changes.

"3. Railroads, steam or electric, no longer have a virtual monopoly of transportation, and regulatory laws based on that theory should be revised in the light of changed conditions affecting transportation and distribution since 1920.

"4. Carriers subject to the interstate commerce act are increasingly engaging, either directly or indirectly, in motor-vehicle operations supplementary to their rail operations, to replace or curtail train operations, or as

feeders or distributing agencies.
"5. Carriers subject to the

"5. Carriers subject to the interstate commerce act should be specifically authorized by law to engage in interstate commerce by motor vehicles on the public highways, and thereafter such motor-vehicle operations

should be subject to the provisions of the interstate commerce act and any act supplementary thereto or amendatory thereof.

"6. Quaere, whether the substitution of station-tostation motor-vehicle service for rail service is lawful.

"7. Railways and water lines should supplement their transportation services by using motor-vehicle transportation in coordination with their rail or water services wherever this will result in economies of operation or betterment of service or both.

"8. Control of motor-vehicle operations by carriers now subject to the act, through subsidiary or affiliated or holding companies or in any other manner, should be brought under the supervision of the commission.

"9. To the extent that a certificate of the life of the life of the life of the life of the life."

"9. To the extent that a certificate of public convenience and necessity is an antecedent to the operation of independently operated motor vehicles, carriers subject to the act should be required to obtain a certificate of public convenience and necessity before engaging in motor-vehicle operations.

"10. A railroad should not be required to secure a certificate of public convenience and necessity before engaging in terminal operation by motor vehicle when such terminal motor-vehicle operation does not serve to extend its line and in fact constitute a line haul.

"11. Modification of the Clayton Antitrust Act to the extent that carriers now subject to that act be permitted to acquire motor-vehicle lines already in operation wherever such action is in the interest of economy and efficiency of operation, and not adverse to the public interest, should be provided for in any legislation for the regulation of motor vehicles engaged in interstate commerce.

"12. Railroads should consider whether economy and efficiency of transportation could be promoted by utilizing the Railway Express Agency as a medium for handling all less-than-carload freight with expedition in service and reduction in charges to the shipper.

"13. Carriers subject to the interstate commerce act and any motor-carrier operations controlled by them should be authorized, but not required by law at this time, to participate in through routes and joint rates with common carrier motor-bus or motor-truck lines holding certificates of convenience and necessity from some regulatory body, and such through routes and joint rates should be made subject to the provisions of the interstate commerce act.

"14. Present railroad classification, particularly in the matter of packing requirements and rules in respect to carload commodity mixtures, should be studied with a view to liberalization and the reducing of transportation costs to the shipper wherever changes can be made without an ensuing undue increase in loss and damage

claims

"15. Congress should declare that the business of operating motor vehicles for hire in interstate commerce on the public highways is affected with public interest

and is so interrelated with transportation by other agencies that it must be considered a part of the national

transportation system.

"16. Regulation of the transportation of persons by motor vehicles for hire operating on public highways in interstate commerce should be provided for by law. Classification for the purposes of regulation of common carriers of persons should be made on the basis of: (a) those operating over regular routes or between fixed termini, and (b) those operating as anywhere-for-hire carriers. Taxicabs, local sight-seeing and school busses should not be included.

"17. Regulation of interstate transportation of property by motor vehicles for hire operating on the public highways in interstate commerce should be provided for by law. Classification for the purposes of regulation should be made on the basis of: (a) those operating over regular routes or between fixed termini, (b) those operating as anywhere-for-hire common carriers, and (c) those operating as motor-vehicle contract

carriers.

"18. Legislation for the regulation of motor-vehicle lines operating as common carriers of persons or property on the public highways, except anywhere-for-hire carriers, should provide as prerequisites to the commencement of such operation: (a) certificate of convenience and necessity; and (b) liability insurance or indemnity bond or satisfactory financial responsibility that will assure adequate protection for the responsibility assumed.

Whether public convenience and necessity require transportation service by motor bus or motor truck between points already adequately served by steam railroads or electric railways so far as they are adapted to render adequate service, involves new principles in the regulation of interstate commerce. In the adoption of basic principles for the determination of this question broad discretion will have to be exercised. Congress should give specific direction as to the manner in which

that discretion should be exercised.

"20. In determining whether or not public convenience and necessity require the granting of a certificate to operate motor vehicles in interstate commerce, reasonable consideration among other pertinent matters, should be given to available transportation service by any other existing transportation agency operating in the same territory, and to the effect which the proposed service may have upon such transportation agency, the continued operation of which is important to the com-

munity served by it.

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"21. The law should provide that the fact that an applicant for a certificate of public convenience and necessity was in bona fide operation as a common carrier over the route or between the termini described in the application for a reasonable length of time prior to the enactment of regulatory legislation and continuously to the time application is made has so been in operation should be considered prima facie evidence of the public convenience and necessity of such operation. If satisfactory showing is made that such applicant is able adequately to perform the service required, a certificate should be issued to the applicant without further proceedings.

Common carriers of persons or property by motor vehicle on the public highways in interstate com-merce should be authorized, but at this time not required, to participate in through routes and joint rates with other common carriers of passengers or property by motor vehicle on the public highways or with steam railroads, electric railways, or water lines subject to the interstate commerce act, provided such motor-carrier

lines hold certificates of public convenience and necessity

from some regulatory board.

"23. Transfer of certificates of public convenience and necessity should be permitted with the approval of the issuing board or the commission. Revocation of a certificate should be authorized under circumstances of urgent public necessity.

'24. As a condition to the exercising of rights granted with a certificate of public convenience and necessity, the holder of the same should be required to undertake to furnish such additional service over the same route or to extend its line as the needs of the

public may demand.

The law should require that the interstate fares and charges of common carriers by motor vehicles be just, reasonable, and not unjustly discriminatory, unduly preferential, or unduly prejudicial. Requirement should be made that tariffs be filed and posted.

"26. Provision should be made for filing complaints against the rates, fares, charges, practices, or services of motor-vehicle lines operating as common carriers in

interstate commerce on the public highways.

"27. Contract carriers engaged in transportation of interstate commerce by motor vehicle for hire on the highways should be required to register with the Interstate Commerce Commission. Contract carriers should, upon registration and proper proof of compliance with such requirements as may be appropriate for the regulation of contract carriers, as distinguished from common carriers, be entitled to a permit setting forth such fact. One of such requirements should be that contract carriers carry liability insurance or file indemnity bond to secure the public in cases of personal injury or property damage. Permits of contract carriers should be for a definite period.

"28. No contract carrier should be allowed to operate a motor vehicle in interstate commerce on the public highways without having first obtained the required

permit.

The commission should be authorized to fix minimum, but not maximum, rates to be charged by contract carriers engaged in the transportation of interstate commerce on the public highways on a mileage or other basis sufficient to cover the cost of the transportation service performed, and rates so fixed should not include any compensation for accessorial service that may be rendered in addition to the transportation service performed. Reasonable latitude should be permitted to prescribe different rates for different sections of the country.

"30. Anywhere-for-hire common carriers engaged in transportation of interstate commerce by motor vehicle on the highways should be required to register with the Interstate Commerce Commission, and upon proof of compliance with such requirements as may be appropriate for the regulation of carriers of that class, be entitled to a permit setting forth such fact. One of the requirements should be the carrying of liability insurance or filing an indemnity bond to secure the public in cases of personal injury or property damage. Permits should be issued for a definite period.

"31. No anywhere-for-hire common carrier by motor vehicle engaged in interstate commerce should be permitted to operate a motor vehicle in such service in interstate commerce on the public highways without first

having obtained such a permit.

"32. Administration of the regulation of motor vehicles operating in interstate commerce over the public highways should be vested in the Interstate Commerce Commission. Where the common-carrier motor-carrier operations involved are or are proposed to be conducted

in not more than three States, matters relating to the issuance of certificates of convenience and necessity; transfer or revocation of certificates; consolidations, mergers, and acquisition of control, complaints as to rates, fares, charges, and service, should be referred to joint Boards composed of representatives of the States in which such motor-carrier operations are or are proposed to be conducted for hearing and recommendation of appropriate order.
"The Interstate Commerce Commission should be

authorized to appoint as a member of any such joint Board any person nominated by the regulatory bodies or Governors of the States involved. The commission should be authorized to designate the member of a joint Board to represent any State whose Governor or regu-

latory body fails to nominate a member.

'The commission in its discretion should be authorized to refer matters where more than three States are involved to joint Boards composed of representatives of the States in which the motor-carrier operations involved are or are proposed to be conducted for hearing and recommendation of order. If for any reason a joint Board cannot be constituted as described, the commission should be authorized to create a joint Board. Members of joint Boards when acting in the administration of the regulation of interstate or foreign commerce should be deemed agents of the Federal Govern-

"Appropriate provision should be made for review of any recommendation or order of joint Boards by the

Interstate Commerce Commission.

"33. The commission should be authorized to confer or hold joint hearings with representatives of any State, in connection with any matter arising out of the administration of motor-vehicle regulatory laws, and be authorized to avail itself of the cooperation, services, records, and facilities of any State in like manner.

"34. Provision should be made for the promulgation of a uniform system of accounts to be used by motorvehicle operators for hire in interstate commerce and for the filing of such reports as may be found neces-

sary in the discretion of the commission.
"35. Broad discretionary power should be permitted in the matter of classification of motor-vehicle operations and with respect to the administration of the provisions of the law. No exemptions should be permitted, however, from the provisions relating to certificates of public convenience and necessity, or permits, liability insurance, or assurance of financial responsibility in case of accident or damage, or as to fares and

charges.
"36. Issuance of stocks and bonds of motor-vehicle placed under the supervision of the Interstate Com-

merce Commission.

"37. Brokerage in transportation for hire of passengers in interstate commerce by motor vehicles operated by an individual or company not holding a certificate of convenience and necessity from a regulatory body covering such service should be prohibited, or brought under control by license requirement with bond sufficient to establish financial responsibility to protect

the public.
"38. The issuance, exchange, or interchange of free passes and free transportation by common-carrier operators of motor-vehicles on the public highways in interstate commerce should be prohibited, except substantially to the same extent as provided for in the case of common carriers now subject to the interstate com-

merce act.

"39. Through rail-and-motor vehicle traffic arrange-

ments which result in the receipt by the rail carrier of any amount other than its published rate, fare, or charge for the rail service as shown by tariffs on file with the commission is violative of section 6 of the interstate commerce act.

"40. The transportation of baggage of a passenger, traveling by motor bus, by a carrier subject to the interstate commerce act without the collection of tariff rates for the baggage service performed by the railroad or water line is a violation of section 6 of the interstate

commerce act.

"41. The transportation of explosives and inflammables by common-carrier motor vehicles in interstate or foreign commerce on the public highways is prohibited by the Transportation of Explosives Act, except in the manner provided therein. The act should be in the manner provided therein. amended to cover all motor vehicles transporting explosives or inflammables on the public highways.

"42. Hours of service, working conditions, training, and wages of employees engaged in the operation of interstate common-carrier motor-vehicles should be on a basis substantially similar to those of railroad operating employees, difference in the two services con-

sidered.

"43. Railroad employees displaced from railroad service by reason of substitution of motor vehicle service for rail service in any way should be transferred, so far as possible and consistent with safety and efficiency of operation, to the motor-vehicle service of the

railroad.

"44. There should be uniform regulation as to sizes, weights, speed, loads, lights, and safety devices of all motor vehicles carrying persons for hire and of all motor vehicles carrying property over the public high-ways either through Federal legislation in respect to such matters covering interstate transportation, or by cooperative action of the Federal Government and State Governments.

"45. Freight forwarding companies should be brought under the supervision of the commission.

"46. Common carriers by motor vehicle holding certificates from some regulatory body operating over regular routes or between fixed termini should be required by law to transport United States mail in the manner, under the conditions, and with the service prescribed by the Postmaster General for a fair and reasonable compensation.

"47. Motor-vehicle competition should be considered, if the facts warrant, as constituting substantially dissimilar conditions in the construction of the provisions of sections 2 and 3 of the interstate commerce act relating to unjust discrimination and undue prejudice

respectively.

48. Federal legislation for the regulation of motor vehicles should include transportation to or from a foreign country to the extent of the transportation service

within the United States.

The commission has no jurisdiction over matters of taxation, but the question of taxation of motor vehicles for hire operating on the public highways has so important an economic relation to the highway competition confronting carriers now subject to its jurisdiction that the commission should direct attention to the necessity for ascertaining in the interest of economically sound and dependable transportation whether or not motor carriers operating on the public highways for hire are contributing towards the construction and maintenance of the public highways used by them an amount commensurate with their use of such highways as places of business.

'50. Section 500 of the Transportation Act, 1920,

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should be amended to include motor-vehicle transportation in the declaration of policy there made."

Following are some extracts from the discussion:

#### An Oversupply of Transportation

Preserving the equilibrium between demand and supply is necessary to the economic soundness of any industry. The transportation industry is no exception. If railway management because of uncertain and economically unsound elements in the transportation scheme can not intelligently plan for the future there may be either an oversupply or an undersupply of transportation, with the public the loser in either case.

future there may be either an oversupply or an undersupply of transportation, with the public the loser in either case.

When one considers the vast amount of passenger-carrying capacity and freight-carrying capacity of motor vehicles that has been added to the transportation facilities of the nation in the past ten years it is evident that there is an oversupply of transportation.

Until the invasion into the transportation field of the newer transportation agencies, it had been generally accepted that a railroad along its own route had a virtual monopoly in transportation. This is not true today. If present conditions continue, the diversion of traffic from railroads will grow and constant losses may so seriously affect passenger travel as to make it impossible to economically operate adequate passenger traffic will make unprofitable the operation of many local merchandise cars and trains that now radiate from the principal cities.

When substantial traffic is lost to the railroads they must recoup themselves by greater revenue drawn from the remaining traffic which means increased charges for those who must continue to use the railroads. Considered from this standpoint, shippers as a whole have an interest in railway investment as transportation charges must be adequate for a fair return.

It is the duty of government to see that adequate and efficient transportation service for the public is supplied and maintained. The problem, How can the commerce of the country be moved most efficiently and economically with assurance of dependable service?, should be approached as one of national transportation and not primarily as one of transportation agencies. Legislation and regulation should not be with a view to preserving and protecting long-existent forms of transportation by stifling or restricting new forms of transportation which may be better equipped to perform certain transportation functions. The public is entitled to the best transportation service. No carrier, by rail, water, motor vehicle, or air, has a vested right in the transportation of a single passenger or a pound of freight.

The present is a period of transition in transportation and distribution. The commodity railroads have to sell is transportation, and they should offer this commodity in the form best suited to meet the needs of the public at the lowest cost. More than ever there must be wide latitude for experiment, trial and test.

#### Co-ordination of Railroad and Motor Transportation

Co-ordination is defined as the "act of regulating and combining so as to give harmonious results." The co-ordination of railroad and motor vehicle service means combining the two agencies so as to produce a harmonious operation which will result beneficially to the public and the transportation agencies themselves. Co-ordination of railroads and highway transportation should be accomplished so as to permit the use of each of these agencies in such a way as to give the public maximum service at minimum cost.

Railroad management should have a receptive and constructive attitude towards new business practices, new methods of distribution and new forms of transportation. Railroads should be permitted to use any agency with a view to making available to the public the most efficient and economical transportation service. Co-ordinating highway transportation with railroad transportation offers a field of transportation expansion which should not only meet modern business needs by lowering distribution costs, but should be reflected in more stable and satisfactory returns upon capital invested in all forms of transportation.

#### Motor Carrier Operations Controlled in Whole or in Part by Railroads

On January 1, 1930, 32 Class I steam railroads or railroad systems had control in whole or in part with a total property investment of \$46,114,891 of motor vehicle operations either directly or through subsidiary or affiliated companies. During

the six-month period, January 1 to June 30, 1930, they operated 3,105 buses over 38,168 miles of intrastate routes and 27,-633 miles of interstate routes. The total number of bus passengers carried by them was 35,930,847, of which 5,090,561 were interstate passengers carried by 10 lines, the others not making a separation as between interstate and intrastate operations; the total passenger revenue was \$16,182,029, of which \$3,371,391 was revenue on interstate passengers carried by the 10 lines making segregation. These figures do not include data with respect to motor-vehicle companies which are neither affiliated nor subsidiaries of the railroads, though having contracts with them for transportation of passengers or property beyond their lines, or in substitution for a rail haul.

Seventeen Class I steam railroads owned, as of June 30,

Seventeen Class I steam railroads owned, as of June 30, 1930, 551 trucks which were operated over 8,863 miles of intrastate routes and 1,546 miles of interstate routes during the first six months of 1930. They also owned 115 trailers. The number of tons carried during the same period amounted to 413,259, of which 22,968 were interstate. The freight revenue was \$1,580,862, of which \$88,311 was from interstate traffic.

#### Cost of Motor Vehicle Operation

Cost of motor-bus operation as shown by the record varies from 11.6 to 32.6 cents per bus-mile. Difference in accounting methods, particularly as to the item of depreciation, variable road and weather conditions in different sections, size of bus, (which is often merely an ordinary automobile) as well as efficiency in management, account for the varying costs.

Costs of motor truck operations instanced in the record range from 11.5 cents to 36.25 cents per truck-mile. As in the matter

Costs of motor truck operations instanced in the record range from 11.5 cents to 36.25 cents per truck-mile. As in the matter of costs for bus operation there is a wide variance due to difference in accounting methods and inclusion or exclusion of certain items as depreciation, taxes, and interest on investment. In some cases no allowance is made for wages where the truck is operated by the owner.

#### Trucks Take Cream of Freight Traffic

Truck operators select their tonnage and take the so-called cream of the traffic, that is, high revenue-producing traffic which would move by rail at the higher-rate classes and leave to the railroads light and bulky freight and other commodities not so desirable from a transportation standpoint. Handicaps under which railroads, and to some extent common-carrier truckers, operate as compared with contract truckers is that the latter are not required to furnish regular and dependable service, may refuse unattractive traffic, may handle traffic with regard to weather conditions, and transfer their operations to more profitable areas as the occasion may demand, or suspend them entirely.

them entirely.

As evidencing the fact that trucks select their tonnage, the Atlantic Coast Line shows the ratio of truck to railroad tonnage in 1930 at points on its line as follows: Brick and tile, 0.09 per cent; canned citrus fruit and canned fruit juice 186.3; cotton, 60.8; cottonseed and cottonseed meal and cake, 8.8; fertilizer, 6.6; fresh fruits and vegetables, 7.2; fresh citrus products, 3.2; furniture, 3.1; oils, greases, etc., 2.4; leaf tobacco, 13; logs, ties, lumber, etc., 17.3; naval stores, 14.9; packing-house and dairy products, 51.4; peanuts, 59.8; fresh berries, 56.3; and merchandise, 63.4. The only exception in the case of the Atlantic Coast Line is logs, which are cut in the woods and it is more convenient to haul them all the way by truck.

by truck.

There is no uniform basis for truck charges even in the same sections of the country. Truck rates unusually include store-door pick-up and delivery service. Some common-carrier truck operators publish scales of rates and state that they adhere to them. Some of these also perform contract trucking for which services there are no fixed rates.

As a rule truckers do not observe classification or classification packing requirements except in the case of a few large trucking lines, nor do they observe minimum charge requirements. Some of the larger truck lines publish class rates observing four classifications. Nearly all truck lines give special rates if the tonnage offered is sufficient in volume.

Because of the present business depression trucks normally used in connection with certain industries, now closed, are being operated as contract trucks for hire. These "unemployed trucks" add a specially disturbing factor to the rate situation as for the most part they are operated by persons inexperienced in commercial trucking and they frequently transport goods at any rate necessary to get the traffic. In some cases truck rates are depressed by the anxiety of the operator to secure return loads or by the immediate cash necessity of the operator. Some contract truck operators are said to accept return loads for charges that will merely cover the cost of the gasoline used.

Interstate motor-vehicle carriers are not required to make reports of their operations to any federal authority, so it is impossible to state what is the total, or what proportion of the total are the number of interstate passengers and the interstate freight tonnage carried by motor vehicles. Certain estimates as to the freight tonnage hauled by motor trucks based on estimates made five or six years ago, which in turn were based upon assumptions as to the estimated mileage per truck and an estimate of the average carrying capacity of trucks at that time, have appeared. Estimates of this character will vary according to the method of calculation. The mere statement of a figure arrived at without an analysis of how it was reached is ant to be misleading.

reached is apt to be misleading.

Ton-mile or tonnage figures do not reflect the effect of truck competition upon railroad traffic, operation, and revenues. Trucks take the cream of the freight traffic, that is, commodities in the higher rail classifications, and the revenue loss sustained by the rail carriers is much greater proportionately than any comparison of tonnage figures would indicate since much of the railroad tonnage is made up of low-grade, heavy-loading commodities such as sand, gravel, brick, stone,

coal, lumber, and cement.

It will be observed that less-than-carload traffic represents 2.6 per cent of the total freight carried (by railroad) but 10.2 per cent of the total freight revenue; also manufactures and miscellaneous commodities were 24.1 per cent of the total freight and 33.8 per cent of the total freight revenue. It is from these two commodity groups that the trucks draw most heavily.

The record shows that in the past two or three years deep inroads have been made by trucks on what hitherto had been considered as invulnerable carload traffic, including such commodities as automobiles and cotton. Changes in merchandise distribution during the past few years requiring a greater use of trucks also tend to withdraw any degree of assurance that might be given to a figure arrived at by projecting estimates of earlier years into 1931, without making appropriate allowance for changed transportation and economic conditions.

ance for changed transportation and economic conditions.

An executive of the Southern Pacific who appeared as a witness, estimated the total freight revenue of California truck operators to be about \$45,000,000 in 1929, while the intrastate freight revenue of the Southern Pacific was \$36,500,000 and its interstate revenue allocated to California was \$46,128,000. He estimated the Southern Pacific's loss in revenue on account of diversion of traffic to the highways in California was about \$15,000,000 in 1929. These estimates were based on a study of highway traffic on the Pacific Coast by the Southern Pacific as a preliminary to engaging in highway operations itself.

One of the most experienced traffic men in the country representing a large association of shippers which is opposed to the regulation of trucks testified: "The railroad Goliath with its resources stands at the mercy of David with his little motor truck"

#### Efforts to Meet Motor Competition

Only within the past few years has there been any substantial effort made by rail carriers to offset the competition furnished by motor-vehicle lines. In the matter of passenger traffic these efforts have consisted of faster through trains with fewer local stops, improved train equipment, more luxurious and comfortable. They have also experimented with reductions in fares. Excursions at appreciably reduced rates have met with varying success in increasing revenues, the most satisfactory results being obtained where they are run at not too frequent intervals. In some cases reduced fares, while increasing traffic, have not shown a net revenue increase. Efforts to prevent further diversion of freight traffic to the highway and to regain some that has been lost have been made by some railroads, but where there has been no co-ordination with truck service in some form the efforts have not met with any great degree of success.

#### Economies from Co-ordination of Rail and Motor Transport

That there is a large field in which economies may be effected by the substitution of motor-vehicle service for train service is indicated by the experience of those rail carriers which have experimented along this line. Substitution of motor vehicle service may not only result in a net saving of operating costs and economy of time, but railroads like the Pennsylvania and the Reading operating into or through congested terminals find that an intangible value develops through the elimination of interference with steam train operations in areas where the traffic is dense.

#### Alleged Subsidizing of Motor Carriers for Hire Operating Over Public Highways

No legislation, regulation, or taxation of motor vehicles operating for hire in interstate commerce should be imposed as an artificial barrier to hold traffic to the rails. Nor should the railroads be forced to engage in competition with any other transportation agency for traffic upon terms that are unfair and inequitable. If motor-vehicle operators use a public highway, constructed and maintained by the general public, as an integral part of their business equipment, without paying a charge commensurate with their use of it, they are subsidized to the extent that such charge is not commensurate. This record does not establish whether or not such is the case. It is of the utmost importance though that the facts in respect of this matter be ascertained as the settlement of this question will be a large factor in fixing the place of the motor vehicle in the economy of transportation and in adjustment and coordination of rail and motor transportation.

The rail carriers refer to the "hidden cost" entering into highway transportation which they charge amounts to a subsidy. They allege that the motor-vehicle operators for hire do not pay a proper share of the cost and maintenance of the highways over which they operate. Motor-vehicle operators contend that the amount of taxes paid by them in the form of franchise, gasoline, and other taxes and fees adequately compensate for their use of the highways.

The question can not be determined by comparing taxes

The question can not be determined by comparing taxes paid by all users of the highway with taxes paid by the railroads, for the question is not what all users of the highways pay but how much do these who use it as carriers for hire pay for such use. It is important to know how much is contributed by the commercial users of the highway on the one hand and by other taxpayers on the other towards highway construction and maintenance. This requires a knowledge of the extent of the use of the highways by the commercial vehicles and a segregation of the taxes and fees they pay from those paid by other users of the highway, which can only be derived from accounts which are not now open to the public and it is consequently difficult to ascertain the facts.

#### Co-ordination in Relation to National Security

Transportation is one of the three most important factors in war. Today, an age of tremendous commercial and industrial enterprise, transportation is primarily considered in its relation to the social life and commercial productivity of the nation. The experience of the World War however shows that consideration must still be given to possible war-time requirements in any plan for coordinating the various agencies into a national transportation system. A transportation expert of the United States Army testified that the fundamental basis of transportation in national defense is a national system of transportation based on an arterial system of railways with due regard to the relation of terminal area operations to trunk line operations and to the co-ordination of rail, water, highway, and air transportation.

The preservation and continued development of an arterial railway system is the most vital feature of transportation from a national defense standpoint. The need for uniform regulation in the several states affecting highway motor transportation and its relation to rail, water, and air transport and the relation of vehicle types, sizes, and gross weights to roads and bridges were stressed. The opinion was expressed that the present trend of railroads in developing supplementary motor vehicle operations should be encouraged, and that anything that would restrict the development of coordinated transportation systems would not be consistent with or in the interest of national defense.

Unrestricted competition is not necessarily helpful to any industry. Competition between carriers that is wasteful, or unnecessarily expensive lays an added burden upon the public. The elimination of wasteful or unduly costly competition in rates or service is desirable.

In a report published by the United States Department of Agriculture in 1926 it was stated that measures which will hasten the stabilization and readjustment of railroad and highway transportation would be beneficial to both industries. The most valuable of such measures were declared to be: (1) The determination of accurate and comprehensive motortrucking costs in order to define the economic field of motortrucking and prevent an overexpansion of the industry; and (2) regulation of commercial motor trucking to discourage expansion beyond its economic limits, and prevent the establishment of an excessively large number of motor-trucking companies.

Regulation of rail carriers was begun when motor vehicle transportation was unknown and amendatory legislation since that time has taken no cognizance of motor transportation as a major transportation agency. Railroads no longer have a virtual monopoly of transportation. There must be a readjustment of the existing regulatory scheme either (1) By removing the legal restraints placed upon rail carriers when they had a monopoly of transportation; or (2) by placing competing forms of transportation under substantially similar restraints and regulation; or (3) by a revision of regulatory laws and reformation of regulatory policies, having in mind changed and changing transportation and distribution. third course seems desirable. There can be no reversion to the law of the survival of the fittest. The public would not tolerate it and transportation agencies would not welcome it. There should therefore be found some way to lessen to some extent the restraints placed upon rail carriers when they had a virtual monopoly of transportation and to bring other forms of transportation under such moderate regulatory control as will make for the most efficient and economic use of each agency. Only in this way can a rational and efficient system of national transportation be developed.

The motor vehicle operations of carriers subject to the act must be brought under control and regulation to substantially the same extent and to the same degree as their rail and water operations if the integrity of present regulatory control

is to be maintained.

Railroads are already engaged in motor vehicle operations. In some instances they compete by motor vehicle with their own rail service as well as with that of other railroads and with independent motor operations; they make advances from revenue derived from their rail operations to meet deficits in motor vehicle operations conducted through their subsidiaries, which is not unlawful. Jaloff v. Spokane, P. & S. Ry Co., 152 I. C. C. 758. Some railroads compete with contract trucks in rate cutting through motor truck subsidiaries. If these conditions are permitted to continue and to expand it will lead to something akin to the chaotic condition in rate structures and competitive conditions referred to at the hearings.

It is not unlawful for rail carriers with their large financial

resources to organize subsidiaries and engage in motor vehicle operations, including contract trucking, on a large scale. There is now practically nothing to prevent this if railway management should decide upon such a course.

#### Public Demand or Need for Motor-Vehicle Regulation

Opponents of regulation of highway motor transportation and particularly of motor trucks aver that there is no public demand for such regulation; that any demand for regulation comes principally from railroad interests and common-carrier motor-vehicle operators; that shippers generally are opposed to the regulation of motor trucks; and that during the hearings substantially no word was heard from the public. Representatives of state regulatory and highway commissions appeared at the hearings and urged regulation of motor vehicles engaged in interstate commerce in order that intrastate regulation might be made more effective.

The National Association of Railroads and Utilities Commissioners at its last national convention held October 20-23, 1931, at Richmond, Va., adopted a resolution favoring the enactment of federal legislation for the regulation of motor vehicles for hire. The commission has received letters and activities for the Livited States described for petitions from citizens of the United States advocating fed-

eral regulation of motor trucks.

Public demand should not be confused with public need or

what is in the public interest,

There was no public demand for legislation providing for federal regulation of railways until the abuses caused by un-bridled competition compelled such action. Certainly no one familiar with the history and development of railway transportation, and particularly as to its economic aspects, will deny that the public and the railroad companies themselves would have fared better if federal regulation of railways had come much earlier than it did.

A bill providing for the regulation of motor vehicles in interstate commerce was introduced in Congress in 1925. was then urged that the industry was too new for regulation and should be allowed to expand. More than six years have elapsed since then and the record in this proceeding shows that the tremendous and unregulated expansion of motor-vehicle transportation is undermining the stability of rate structures and relationships and is not in the interest of dependable national transportation.

The test should be—Is there need in the public interest for appropriate regulation of motor vehicles for hire in interstate

commerce, the present and future prosperity of all transportation agencies, and the assurance of a dependable national transportation system. It is better in the interest of the public and of the transportation industry to have regulation which forestalls, rather than regulation which results because of conditions giving rise to an unmistakable public demand.

It is suggested that possibly the commission might authorize the separate filing of motor-competitive railroad rates in tariffs devoted to that purpose in areas or circumstances where that competition is peculiarly burdensome to the railroads, so that normal tariffs and tariff rules would not be affected by the disturbing influences arising from their required publication of motor-competitive rates. So radical a departure is not warranted at this time.

# I.C.C. Reversed in Western Grain Rate Case

INDING it unnecessary to announce its interpretation of Section 15a of the interstate commerce act, which had been hoped for, the Supreme Court of the United States, in a decision rendered on January 4, ordered the Interstate Commerce Commission's downward revision of western grain rates set aside on the ground that the commission had denied the railroads' applications for a rehearing in view of the drastic change in economic conditions and in railroad earnings between the close of hearings in the case and the date

of the commission's order in 1931.

While there is some disappointment that the court has failed to decide the important controversial question as to whether Section 15a does not include more practical meaning than the commission has been willing to attribute to it in its relation to the earlier provisions in Section 1, the decision, which was unanimous, at any rate represents an important victory for the railroads, which had estimated that their revenues would be reduced approximately \$20,000,000 a year by the rate revision made effective on August 1. Moreover, the opinion by Chief Justice Hughes includes language plainly indicating the view of the court that rates which might have been reasonable under conditions existing in 1928 and 1929 are not necessarily reasonable in a "different economic era" and under "present rein a "different economic era" and under "present requirements." The case was not particularly concerned with the ability of the traffic to bear the rates and if the effect of the reductions since last August has been to improve the condition of agriculture to any extent that fact has not been loudly proclaimed.

The decision was rendered on the appeal taken by the Atchison, Topeka & Santa Fe and other western roads from the decision of the district court for the northern district of Illinois last July which after first temporarily enjoining the rate reduction had later held the commission's order to be within its powers.

#### No Reference to "Fair Return"

It had been hoped that the highest court would find occasion to render a decision as to the power of the commission to reduce rates on a major class of freight throughout a wide territory in the face of a specific finding that the railroads as a group had never earned the fair return contemplated by Section 15a. Instead. however, the court ordered the case remanded to the lower court with direction to grant the injunction on the fundamental ground that the commission had re-fused in March, 1931, to grant the rehearing and reconsideration repeatedly asked by the carriers. It said that, although the commission has broad powers and a wide extent of administrative discretion, its action in ordering such an extensive reduction in 1931 on a record closed in 1928 followed by oral argument in 1929, after twice denying an opportunity for the presentation of evidence relating to the change in conditions, "was not within the permitted range of the commission's discretion, but was a denial of right." After outlining the contentions made by the railroads, the commission and certain shippers, the court said:

We do not find it to be necessary to consider these contentions, and the counter arguments advanced on behalf of the Commission, or to review the Commission's reports, as it is sufficient for the present purpose to deal with the fundamental question presented by the action of the Commission in denying the appellants' second application for a rehearing. Ordinarily, a petition for rehearing is for the purpose of directing attention to matters said to have been overlooked or mistakenly tion to matters said to have been overlooked or mistakenly conceived in the original decision and thus invites a reconsideration upon the record upon which that decision rested. The second petition for rehearing, in this proceeding, was not of that character. It was of the nature of a supplemental bill. It presented a new situation, a radically different one, which had supervened since the record before the Commission had been closed in September, 1928. It asserted that whatever might be the view of the order when made, and upon that record, a changed economic condition demanded reopening and reconsideration. The carriers insisted upon this reopening as a right guaranteed to them not only by the Act of Congress but by the Constitution itself.

There can be no question as to the change in conditions upon which the new hearing was asked. Of that change we may take judicial notice. It is the outstanding contemporary fact, dominating thought and action throughout the country. As the Interstate Commerce Commission said in its recent report the Interstate Commerce Commission said in its recent report to the Congress, "a depression such as the country is now passing through is a new experience to the present generation." The Commission also recognized in that report "the very large reductions in railroad earnings which have accompanied the economic depression," and stated that "the chief cause of these reductions has been loss of traffic." For "in such depressions the railroads suffer severely. Their traffic is a barometer of general business conditions." general business conditions.

It is plain that a record which was closed, in September, 1928—relating to rates on a major description of the traffic of the carriers in a vast territory—cannot be regarded as representative of the conditions existing in 1931. That record persentative of the conditions existing in 1931. That record pertains to a different economic era and furnishes no adequate criterion of present requirements. While the effects of the widespread economic disturbance have had a progressive manifestation, they had been sufficiently revealed in February, 1931, when the record positive for subscript was recorded. when the second petition for rehearing was made, to compel the conclusion that the record of 1928 afforded no sufficient basis for the order of the Commission. The facts were set forth in the carriers' petition. They pointed to the grave reductions, in traffic and earnings, from which they were suffering, that their net operating income for 1930 was over \$100,ing, that their net operating income for 1930 was over \$100,-000,000 less than their average annual net operating income for the five years preceding, and that their credit was seriously impaired. At the time of this petition, the order revising the rates on grain and grain products in the Western District had not yet become effective, but the Commission stood upon the record of 1928 and, without reopening the proceeding or taking further evidence, provided that its order should become effective on June 1, 1931. In justification of this course, it is urged on behalf of the Commission that its determination had been reached after regularly conducted and protracted hearbeen reached after regularly conducted and protracted hearings in which carriers and shippers had cooperated and that the adjustments related not only to the level of rates but to the relation of rates and to discriminatory and wasteful practices, and that a reopening would have meant further lengthy proceedings. It is said that "in performing its legislative function of prescribing reasonable rates, the Commission necessarily projects into the future the results of a decision based on the conditions disclosed in the record," and that its determination "cannot reflect accurately fluctuating conditions." These suggestions would be appropriate in relation to ordinary applications for rehearing, but are without force when overruling economic forces have made the record before the Commission irresponsive to present conditions. This is not the usual case of possible fluctuating conditions, but of a changed economic level. And the prospect that a hearing may be long does not

justify its denial if it is required by the essential demands of justice.

We are thus brought to the fundamental considerations governing the authority of the Commission. It has broad powers and a wide extent of administrative discretion, with the exand a wide extent of administrative discretion, with the exercise of which, upon evidence, and within its statutory limits, the courts do not interfere. The important and salutary functions of the Commission to enforce public rights are not to be denied or impaired. But the Commission, exercising a delegated regulatory authority which does not have the freedom of ownership, operates in a field limited by constitutional rights and legislative requirements. Its duty under sections 1 (5), 3 (1) and 15 (1) of the Interstate Commerce Act with respect to the prescribing of reasonable rates and the preventing of unreasonable or unjustly discriminatory or unduly prefrespect to the prescribing of reasonable rates and the preventing of unreasonable or unjustly discriminatory or unduly preferential practices, has not been changed by the Hoch-Smith Resolution. Ann Arbor Railroad Company v. United States, 281 U. S. 658, 669. The legal standards governing the action of the Commission in determining the reasonableness of rates are unaltered. In the discharge of its duty, a fair hearing is a fundamental requirement. Interstate Commerce Commission a fundamental requirement. Interstate Commerce Commission v. Louisville & Nashville Railroad Company, 227 U. S. 88, 91. In the instant proceeding, the hearing accorded related to conditions which had been radically changed, and a hearing, suitably requested, which would have permitted the presentation of evidence relating to existing conditions was decided. We evidence relating to existing conditions, was denied. We think that this action was not within the permitted range of the Commission's discretion, but was a denial of right. The order of the Commission which was thus made effective, and the ensuing supplemental order, cannot be sustained.

The order of the District Court refusing an interlocutory injunction is reversed, and the cause is remanded with direc-

tion to grant the injunction as prayed.

The original order of July 1, 1930, in the case was to go into effect on October 1, 1930, but because of mechanical difficulties in the preparation and printing of the tariffs, containing the great number of the revised rates, the effective date was postponed from time to time. In September, 1930, the carriers had asked for a rehearing, which was denied in November, 1930. Prior to its denial, a statement was submitted to the commission on behalf of the Western Association of Railway Executives, directing attention to the serious financial condition of the carriers. A further petition for rehearing was presented to the commission on February 18, 1931. This petition described in great detail the situation then existing. The carriers alleged that since the closing of the record before the commission in September, 1928, there had been material and important changes in the operating, traffic and transportation conditions in the Western district which affected adversely the revenues of the carriers, and that, regardless of the question of the validity and propriety of the order when made, it would no longer be valid and proper in the light of the existing circumstances. The carriers alleged and offered to prove that, if the order became effective, it would reduce the gross and net operating revenues of the carriers in the Western district not less than \$20,000,000 annually.

The commission denied the application for rehearing on March 3, 1931. On April 10, 1931, the commission made its supplemental report and order, modifying and supplementing in certain particulars its original report and order, and provided that the order as thus modified should become effective on June 1, 1931. Thereupon, the suits were brought in the federal court at Chicago.

THE SWISS FEDERAL RAILWAYS, in spite of the general depression, which has been reflected in a substantial decline in traffic, have adopted a heavy construction program for 1932. the amount allotted for new work being 86,000,000 francs (approximately \$17,200,000), or only about \$520,000 less than in 1931. Most of the 1932 outlay will go, according to newspaper reports from Berne, to complete a double track program, continue electrification, and convert additional rolling stock for

# Number of Defective Locomotives Continues to Decline

Twentieth annual report of the Bureau of Locomotive Inspection to the I.C.C. shows only 10 per cent of locomotives inspected found defective

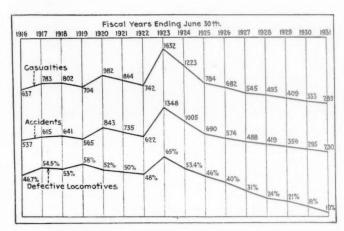
THE twentieth annual report of the Bureau of Locomotive Inspection to the Interstate Commerce Commission for the fiscal year ending June 30, 1931, shows a further reduction in the number of defective locomotives, accidents and casualties. In his report, A. G. Pack, chief inspector of the Bureau, points out that there were fewer locomotive accidents during the fiscal year than at any time during the past 20 years, and that this reduction has been consistently made in about the same ratio as the condition of locomotives has been improved.

During the eight years since 1923 locomotives found defective have been steadily reduced to 10 per cent, accidents to 230 and casualties to 285. Boiler explosions continue to be the greater source of accidents, 15 of the 16 deaths during the year being attributed to that cause. During 1930-31, ten enginemen and five shop employees were fatally injured and 216 members of train and engine crews and 31 shop and enginehouse employees were injured.

All factors considered, the continuance of the reduction in the number of defective locomotives, accidents and casualties reflects the effective efforts of the mechanical and other departments which are being made to meet the difficult problems created by the curtailment of expenditures for maintenance of equipment. An abstract of Mr. Pack's report follows:

#### Mr. Pack's Report

During the year 10 per cent of the steam locomotives inspected by our inspectors were found with defects or



Relation of Defective Steam Locomotives to Accidents and Casualties Resulting from Locomotive Failures

errors in inspection that should have been corrected before being put into use as compared with 16 per cent for the previous year. This reflects the best condition of locomotives in service ever recorded. A summary of all accidents and casualties to persons occurring in connection with steam locomotives compared with the previous year shows a decrease of 22 per cent in the number of accidents, an increase of 23 per cent in the number of persons killed, and a decrease of 15.9 per cent in the number of persons injured. The increase in the number of persons killed was due to one particularly violent boiler explosion in which six persons were



Switch Engine Enveloped in Steam from the Blow-off Cock—Boiler-Water Conditions and Attempts of the Railroad to Extend the Periods Between Boiler Washouts Required Frequent Manipulation of the Blow-Off Cock to Prevent Foaming



Result of Crown-Sheet Failure on Account of Low Water—This Accident Caused the Death of Two Employees and Serious Injury to Another

killed. This explosion was due to lapse of ordinary caution on the part of the enginehouse force rather than to any structural defect in the boiler.

From 1923 to 1931, both inclusive, the percentage of locomotives inspected found defective consistently decreased from 65 to 10; the number of locomotives ordered out of service decreased in the same manner from 7,075 to 688, or 90.3 per cent; the number of accidents decreased from 1,348 to 230, or 82.9 per cent; the number of persons killed decreased from 72 to 16, or 77.8 per cent; the number of persons injured decreased from 1,560 to 269, or 82.8 per cent.

There were fewer locomotive accidents during the fiscal year 1930-31 than at any time during the past 20 years. This reduction has been consistently made in about the same ratio as the condition of locomotives has

#### Accidents and Casualties Caused by Failure of Some Part of the Steam Locomotive, Including Boiler, or Tender

Number of accidents	1930	1929	1928	1927	1926
	295	356	419	488	574
Per cent increase or decrease from previous year	17.1	15	14.1	14.9	16.8
	13	19	30	28	22
Per cent increase or decrease from previous year		36.6		*27.3 517	*10 660
Per cent increase or decrease from previous year		0.0			

<sup>\*</sup> Increase.

been improved. If proper inspections and repairs are made in accordance with the requirements of the law and rules many accidents will be avoided. Some of the carriers are maintaining their locomotives in such condition as to fully meet all the requirements of the law and the rules, regulations, and instructions made or given thereunder while other carriers were found to be delinquent in various degrees.

#### Boiler Explosions or Crown-Sheet Failures

As in former years, boiler explosions caused by crown-sheet failures continue to be the source of most of the fatal accidents; 93.7 per cent of the fatalities during the year occurred from this cause as compared

with 84.6 per cent for the previous year. It has been pointed out in former reports that the increasing size of locomotive boilers and the higher pressures carried therein tend to increase the violence of explosions and cause increase in the average number of casualties per accident. Notwithstanding, there has been a marked decrease in the number of boiler explosions and firebox failures as the result of low water and other causes. For instance, during 1912 there were 94 accidents as compared with 14 during 1931, or a reduction of 85.1 per cent; 54 persons killed as compared with 15, or a reduction of 72.2 per cent; and 168 persons injured as compared with 41, or a reduction of 75.6 per cent. This class of accidents can be minimized only by the use of the safest practicable firebox construction, reliable boiler feeding and water level indicating devices, and maintenance of proper water level in the boiler.

#### Suits for Penalties

Three suits for penalties, involving 44 counts for alleged violations of the locomotive inspection law and

#### Number of Persons Killed and Injured in Steam Locomotive Accidents

	1931	1	930	1	929	1	928	1	927
	Cilled In-	Kill	ed In- jured	Kill	ed In-	Kill	ed In- jured	Kill	ed In- jured
Members of train crew:									
Engineers	5 73 5 75	4	100	7	128	8	151	8	181
Firemen		4	123	7	128	11	161	9	179
Brakemen	. 39	4	32	1	45	4	54	4	51
Conductors	. 21		10		24		16		25
Switchmen			10	1	11		15	1	13
Enginehouse and shop employees:									
Boiler makers	. 3		1		5	3	5 4		11
Machinists	1 4		3		2	3 2	4	1	5
Foremen			1		1		1		5
Inspectors			3		1		1		
Watchmen	. 5		2		1 3	1	2	2	
Boiler washers			2 2 3		1			1	4 2 7
Hostlers			3		5		10	1	7
Other enginehouse and shop em-									
ployees	2 6	1	8	1	3		8		10
Other employees			6	2	10		12	1	9
Nonemployees	1 22		16		23	1	23		19
Total	16 269	13	320	19	390	30	463	28	517

rules, were pending in the district courts at the beginning of the year. Judgments in favor of the Government were obtained in 2 cases, involving 14 counts; five counts were dismissed by stipulation or agreement, and penalties imposed on nine counts in the sum of \$900. One case, involving 30 counts, was pending at the end of the year.

No formal appeal by any carrier was taken from the decisions of any inspector during the year.



Motorized Material Handling at Huntington, W. Va., on the Chesapeake & Ohio

# Raise 3330-Ton Bascule Span 11½ Ft.

Railway grade-separation project at Chicago gives rise to an unusual engineering problem

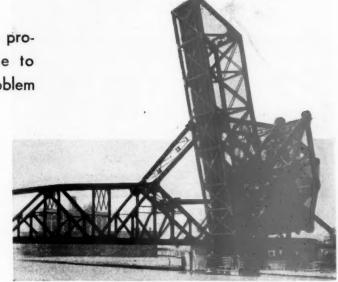
THE new double-track Strauss-type bascule bridge of the Baltimore & Ohio Chicago Terminal across the Chicago river at Fifteenth place, which has a 186-ft. movable leaf and weighs 3,330 tons, was raised 11½ ft. in five days without a hitch. This unusual engineering feat was necessary to meet the grade requirements of a railway grade-separation project at Fifteenth place and Stewart avenue, Chicago, which was described in the Railway Age of August 15, 1931.

The need for this change in the elevation of the new bridge was anticipated in the design, because the structure had to be completed to meet the schedule for the relocation of the river channel, which it crosses, and in advance of the completion of negotiations for the grade separation. However, in spite of this advance preparation, the project involved many complications, among others, the necessity for raising the counterweight-trunnion legs of the tower 16 in. higher than the maintrunnion legs to provide for a change in the grade of the track on the tower span from 1.5 per cent ascending eastward to 1.16 per cent ascending westward. The operation of raising was conducted with the movable leaf in the fully open position, as the temporary transfer of traffic to the adjacent bridge of the St. Charles Air Line made it unnecessary to provide for railway traffic while the work was in progress.

The counterweight tower of the bridge has four legs resting on four cylindrical piers (all on land), the bear-



View of the Raising Castings at One Corner and Portions of Two of the Bracing Diaphragms Before the Encasement Was Placed



The B. & O. C. T. Bridge After It Was Raised, the Raising Castings Concealed by the Staging at Each Corner—St. Charles Air Line Bridge at the Left

ings being 50 ft. center to center, front to rear, and 331/2 ft. center to center, side to side. The general scheme for raising the tower was to apply jacks alternately at the two forward (main trunnion) bearings and the two rear (counterweight trunnion) bearings so that the tower would be lifted only at one end at a time while the other end remained fixed. The first step, therefore, was to replace the bearing castings, 2 ft. 4 in. deep under each corner with rocker-bearing assemblies, each of which consisted of a cast steel half cylinder of 18-in. radius resting in a lower casting with a corresponding concave surface. With these surfaces well coated with graphite grease, the rockers served adequately to accommodate the changes in angle between the bottom chord of the tower and the plane of the supports during the teetering operation of jacking first at one end and then at the other. The use of these rocker castings permitted the large bearing surfaces of the tower to accommodate themselves to the supporting surface below. Otherwise an almost prohibitive number of large bevelled shims would have been required.

The jacking was done with four hydraulic jacks under each corner, using 300-ton Watson-Stillman jacks under the main trunnions and 500-ton jacks under the counterweight trunnion legs. The jacks were operated by water pressure from a four-cylinder, single-acting, high-pressure, plunger pump of the same make, with a displacement of 19.2 in. per complete stroke and gearconnected to a 30-hp. Westinghouse motor. The water was delivered through ¾-in, seamless steel tubing except that leads of flexible copper tubing of 13/16-in. outside and 3/8-in. inside diameter were provided at the jacks to permit of ready handling. The jacks, pump and piping were designed for a working pressure of 8,500 lb. per sq. in. but the dimensions of the jacks were such that a pressure of about 5,700 lb. was sufficient to lift the bridge. The pump was installed in a temporary house on the track floor of the tower. The unusual feature of the jacks was the use of special pin-type heads, permitting adjustment of the head to



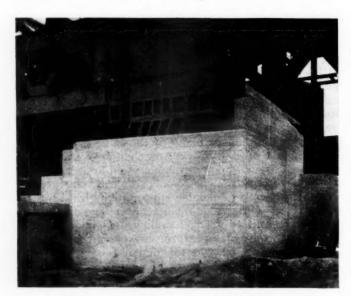
View of the Jacking Rig and Rocker Assembly at One of the Counterweight Piers

the jacking surfaces of the towers. During lifting operations one end of the tower was supported on these rotating jack-heads and the other end, on the rocker-castings previously mentioned.

#### **Employ Cast Steel Raising Blocks**

The bridge was blocked up, as it was raised, on steel castings 6 in. thick by 5 ft. 10 in. wide and 6 ft. long (lengthwise of the bridge). As this jacking project was anticipated in the design, the bottom chords of the tower were designed for jack reactions and were of sufficient length and width to allow room for two jacks on each side of the rocker casting. The bridge seats of the piers also readily accommodated the jacks, which were mounted in pairs on a pan consisting of a 1½-in. steel plate 20-in. wide with a 3½-in. by 3½-in. angle on each end, from which 1/2 in. wire ropes were carried up to the foot lifts of track jacks mounted on brackets on the two sides of the chords. By this means, the hydraulic jacks could readily be lifted to a new position after each successive lift of the bridge, to permit the insertion of raising castings under them.

An interesting accessory was provided in the form of two levels that were installed against the two end floor



View at the Counterweight End After the Raising Castings and Bracing Beams Had Been Encased in Concrete

beams of the tower to guard against warping of the tower frame through unequal raising of either of the corners at one end of the tower or the other—which ever one was being raised at any given time. These levels consisted of a length of 34-in. pipe laid on the top of the bottom flange of the floor beam with an elbow and a short length of vertical pipe at each end near the trusses and terminating in a piece of graduated glass tubing that was open to the atmosphere. By filling these pipe assemblies with colored water and marking the water level in each tube before jacking was started, it was possible to note any deviation from cross-level.

#### A Slight Longitudinal Movement

One detail of the bearings complicated the work of raising, namely, the fact that the bridge had been built with the structural framing at the main trunnions extending to a depth of 1 ft. 9 in. below the bottom

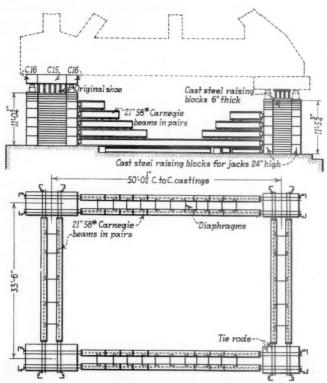


Diagram of the Raising Structure

chords of the tower, and as bearing shoes of the same depth were used at all four piers, this made it necessary to have the bridge seat 1 ft. 9 in. lower on the two main-trunnion piers. Moreover, as will readily be seen, to jack up the ends of the tower alternately with rocker bearings that are not at the same elevation would result in a progressive shifting of the span in the direction of the lower of the two pairs of rockers, i.e., toward the river, and would increase with the amount of lift made at each step. To keep this to a minimum, the two ends of the tower were lifted one inch at a time until the bridge had been raised 1 ft. 9 in., at which elevation it had crawled forward 3/4 in, in exact agreement with the computed movement. Following this, all of the raising plates and castings that had been placed under the rocker bearings on the counterweight piers were removed, the rocker bearings were lowered to the pier, and a single casting approximately 1 ft. 9 in. thick, known as C 15, was placed between the rocker bearings and the bottom chord of the tower. This shift had the result of placing all the rocker bearings at the same elevation. Similar castings, C16, were also placed on top of the jacks, so that the jacks also would all be at the same level.

During this preliminary raising of the bridge, with alternate one-inch lifts, it was necessary to use one-inch raising plates until a raise of six inches had been completed, when the plates were replaced by six-inch However, the remainder of the raising was done in six-inch lifts, the permanent castings being placed at once. Six-inch castings were also placed under the jacks, but after every raise of 24 in. the sixinch castings were replaced by a 24-in. casting.

·After the tower had been raised to the required elevation for the main trunnion end the raising was continued under the counterweight legs, the tower rotating about the rocker bearings on the other two piers until a further raise of 16 in. had been made at the counterweight end.

The main trunnion and counterweight trunnion ends of the tower were then jacked up in turn sufficiently to permit the rocker bearings to be shifted first to one side and then to the other so that the wells formed by the cored holes in the raising castings could be filled with a 1:3 cement mortar. The rocker bearings were then removed and replaced by the original bearing shoes, using shim plates of the required thickness to

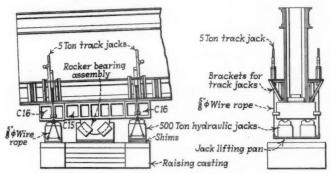


Diagram of the Jacking Rig at the Counterweight End After C15 and C16 Had Been Placed Above the Jacks

obtain the correct elevation at each corner. This completing the need for the jacks, they were removed and the wells in the tiers of jack-supporting castings were similarly filled with mortar.

#### Unique Bracing Arrangement

The manner in which longitudinal and transverse stiffness was provided for the tiers of raising castings is unusual, the design of bracing adopted being predicated on the requirement that adequate stiffness be provided at all times during the progress of the raising. It consists of structural steel diaphragms connecting the tiers of raising castings in the form of a rectangle and resting on the concrete diaphragms between the piers. These steel diaphragms consisted of pairs of 21-in. 58-lb. Carnegie beams which were introduced, one at a time, on all four sides with every raise of 24 in. The transverse diaphragms are composed of five tiers of full-length beams, while in the two longitudinal diaphragms short beams were used in the upper tiers in a stepped arrangement.

After the raising of the bridge had been completed the entire underpinning structure was encased in concrete. The rest pier and approach span on the east side of the river was raised so as to be ready to permit the closing of the span by the time the bridge had been

The work was carefully planned, the contractor being furnished with a schedule outlining the operations, step by step, in the minutest detail. The contractor arranged for an unusual degree of supervision so that the work of the various sub-gangs was thoroughly co-ordinated at all times. The bill for material included a considerable supply of shim plates of assorted thicknesses ranging from 1/16 to 3% in. to adjust the cross level of the tower during the raising, but few of them were needed except to obtain the required final elevation. Readings taken on the pressure gages during the jacking indicated a total weight of the structure of 3,375 net tons, which represents a deviation of only 45 tons or 1.35 per cent from the weight determined by careful computations from the detail drawings.

The plan for raising the bridge was developed and carried out under the direction of P. G. Lang, Jr., engineer of bridges of the Baltimore & Ohio, and of the B. & O. C. T., L. G. Curtis, chief engineer and H. D. Clarke, resident engineer, B. & O. C. T. The Ferro Construction Company of Chicago was the contractor.

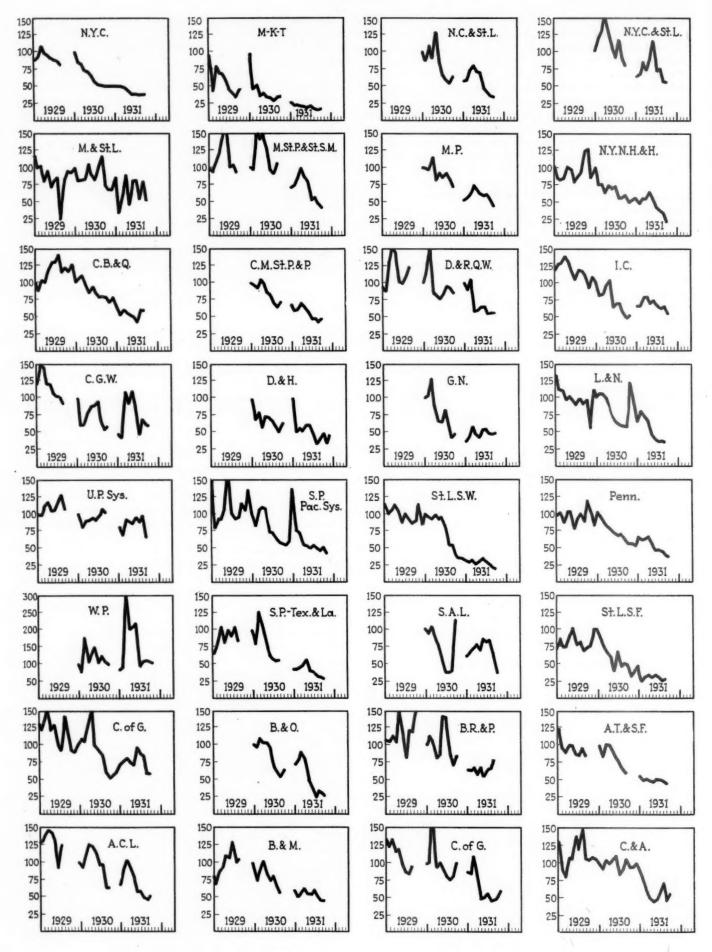
# R. B. A. Urges Loans For Railroad Improvements

WASHINGTON, D. C. LBA B. JOHNSON president, Railway Business Association, has addressed a letter to Senator Norbeck, chairman of the committee on banking and currency, to urge that the Reconstruction Finance Corporation beyond peradventure have authority to include in its railway loans and other aids to railway credit the temporary financing of improvements as distinguished from refunding. It was suggested that amendments, if any, to the original draft of the railroad clause be closely scrutinized to guard against exclusion of credit aid for improvements, and that the report and oral interpretations of the measure to the Senate emphasize the railway improvements as one of its definite objects.

This appeal was made by the Railway Business Association on behalf of the railway supply industry, employing when times are good between one and two million men. This group now, with the communities accustomed to depend on these payrolls, for many months has suffered from severe unemployment. referred to the statement by President Willard of the Baltimore & Ohio, to the subcommittee, that the B. & O. has no money available for improvements in 1932, and that the same thing is true of other roads, which must have large sums at reasonable rates or stop work now

in progress.

As originally drawn, the bill apparently does not impose upon the corporation any limitation of the purposes to which the proceeds of railroad loans shall be applied. The clause reads: "The Corporation may also make loans to or aid in the temporary financing of steam railroads engaged in interstate commerce, when in the opinion of the board of directors of the Corporation such railroads are unable to obtain funds upon reasonable terms through banking channels or from the general public." "For the most part, however," Mr. Johnson said "witnesses kept the stress on refunding. We are anxious that an atmosphere shall be preserved (Continued on page 88)



Trends of Purchases of Representative Railroads by Months-Purchases in January, 1930, Taken as 100

# The Railroads are Still Huge Spenders

Purchases exceed 863 million dollars in 1931–Old year ends with scant working stocks and buying 20 per cent below normal

LTHOUGH compelled by the protracted depression in business to make reductions in purchases which will long be remembered in railway buying, the railways of the United States expended a sum in the markets of the country last year for materials and supplies which should impress those who have done so much to harass the railroads, as well as those who are in the habit of measuring railway buying only by the yardstick of car and locomotive orders. Since reports covering purchases during December, and some reports for November, are not available, statistics at this time are necessarily preliminary, but estimates based on all the reports of purchases which have been received by the Railway Age during the previous year place the direct expenditures of the Class I railroads in 1931 for materials, supplies and fuel at approximately \$695,000,000 a figure which is enlarged to \$863,000,-000 when the supplies acquired indirectly by the rail-

ways, and also the equipment, are considered. This sum, which represents an average expenditure of more than \$72,000,000 a month, was made in the face of an unusually small amount of equipment buying

unusually small amount of equipment buying.

Total purchases for 1931 included \$224,200,000 for fuel, approximately \$50,800,000 for rail, \$59,700,000 for ties, and \$360,300,000 for miscellaneous materials. Fuel purchases were divided \$185,500,000 for bituminous coal, \$5,100,000 for anthracite coal, and \$30,100,000 for fuel oil. Total purchases of forest products, which amounted to approximately \$75,500,000, included approximately \$13,800,000 for lumber and timber, in the face of drastically-reduced car repair and bridge work.

Purchases of iron and steel products, although greatly reduced, amounted to approximately \$220,000,000, including \$40,500,000 for track materials other than rail, \$22,000,000 for wheel tires and axles, \$30,500,000 for locomotive and car parts, and approximately \$10,000,-

Purchases of Fuel,	Materials and Supplies b	Class I Railways of the	United States—1924 to 1931
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Item	1931	1930	1929	1928	1927	1926	1925	1924	1923
Fuel Forest products Iron and steel prod-	\$224,200,000 75,500,000	\$306,500,000 134,600,000	\$364,392,000 157,551,000	\$384,608,000 160,794,000	\$438,821,000 175,729,000	\$473,354,000 186,291,000	\$459,465,000 170,305,000	\$471,656,000 180,872,000	\$617,800,000 232,511,000
ucts	220,000,000 175,300,000	329,700,000 167,700,000	437,840,000 369,752,000	397,544,000 328,395,000	432,604,000 348,774,000	507,302,000 392,085,000	419,255,000 343,018,000	365,610,000 324,917,000	464,955,000 423,437,000
Grand total		\$1,038,500,000	\$1,329,535,000	\$1,271,341,000	\$1,395,928,000	\$1,559,032,000	\$1,392,043,000	\$1,343,055,000	\$1,738,703,000
Per cent of operat- ing revenue	16.8	20.2	21.8	20.8	22.8	24.4	22.7	22.7	27.6

#### Preliminary Statement of Purchases of Class I Roads of the United States-1931

Item	1931	1930	1929	1928	Per cent of Total
Fuel: Bituminous coal Anthracite coal Fuel oil All other	\$185,500,000 5,100,000 30,100,000 3,500,000	\$242,100,000 6,950,000 53,600,000 3,850,000	\$287,999,000 8,372,000 62,132,000 5,889,000	\$301,935,000 10,261,000 67,051,000 5,361,000	26.62 0.73 4.34 0.51
Total fuel	\$224,200,000	\$306,500,000	\$364,392,000	\$384,608,000	32,20
Forest Products: Cross ties (treated and untreated). Switch and bridge ties (treated and untreated). Timber and lumber. Other forest products.	\$53,200,000 6,500,000 13,800,000 2,000,000	\$75,500,000 9,150,000 43,550,000 6,400,000	\$83,421,000 10,642,000 55,002,000 8,486,000	\$95,684,000 9,376,000 49,598,000 6,136,000	7.64 0.93 1.99 0.29
Total forest products	\$75,500,000	\$134,600,000	\$157,551,000	\$160,794,000	10.85
Steel rail (New and second-hand, except scrap)	\$50,800,000 22,000,000	\$75,000,000 32,700,000	\$94,195,000 41,269,000	\$92,181,000 39,727,000	7.30 3.16
plates, rail anchors, etc	40,500,000	53,700,000	70,971,000	67,376,000	5.83
Iron bridges, turntables, structural steel, bar iron and steel, forgings, fabricated and unfabricated shapes, and pressed steel parts.  Flues and tubes for locomotive and stationary boilers.  Telegraph and telephone, interlocking and signal material.  Bolts, nuts, washers, rivets, springs, etc.  Locomotive and car castings, beams, couplers, frames and car roofs Machinery, boilers, repair parts and all other iron and steel products	30,500,000 4,200,000 10,000,000 10,000,000 29,300,000 22,700,000	39,200,000 6,200,000 25,000,000 14,800,000 47,500,000 35,600,000	57,330,000 7,194,000 30,878,000 20,272,000 65,086,000 50,645,000	45,001,000 8,714,000 22,969,000 18,446,000 59,647,000 43,483,000	4.40 0.60 1.44 1.44 4.21 3.27
Total iron and steel products	\$220,000,000	\$329,700,000	\$437,840,000	\$397,544,000	31.65
Cement	\$3,000,000	\$5,100,000	\$7,628,000	\$6,300,000	0.47
Lubricating oils and grease; illuminating oils, boiler compound; waste Metals and metal products. Ballast Air-brake material and appliances for locomotives. All electrical materials. Stationery and printing. Commissary supplies for dining cars and restaurants. Rubber and leather goods. Painters' supplies and chemicals. Automotive equipment and supplies. Train and station supplies and all other miscellaneous purchases	12,200,000 27,800,000 12,500,000 10,500,000 13,200,000 14,500,000 5,000,000 17,800,000 1,500,000 46,400,000	18,200,000 41,500,000 18,500,000 18,000,000 14,700,000 20,300,000 21,500,000 7,500,000 1,600,000 7,4000,000	24,328,000 57,497,000 23,750,000 25,043,000 17,641,000 28,899,000 9,657,000 35,985,000 2,545,000 111,212,000	23,968,000 49,826,000 23,749,000 22,112,000 18,400,000 25,638,000 9,521,000 33,794,000 2,031,000 87,001,000	1.91 4.37 1.97 1.72 1.66 2.08 2.28 0.79 2.81 0.23 7.33
Total miscellaneous. Grand total.	\$175,300,000 \$695,000,000	\$267,700,000 \$1,033,500,000	\$369,752,000 \$1,329,535,000	\$328,395,000 \$1,271,341,000	27.62 100.00

000 for signaling materials. Purchases of miscellaneous materials included about \$3,000,000 for cement, \$12,-200,000 for lubricants and illuminating oils, \$12,500,000 for ballast, \$10,500,000 for electrical materials, and

\$14,500,000 for commissary supplies.
A significant feature of railway purchases in 1931, and a feature which attracts attention particularly from the standpoint of its bearing upon their future purchases in the markets of the country, is the fact that purchases were only 16.8 per cent of operating revenues in 1931, as compared with 20.1 in 1930, 21.8 in 1929, 20.8 in 1928, and 22.8 in 1927, and averaged 21.5 during the last five years. This condition supports the contention that the railway buying was less in 1931 than it should have been to maintain the properties adequately.

In 1930, the value of materials and supplies on hand on Class I railroads amounted to \$430,989,288. Re-

Ratio of Railway Purchases to Operating Revenues-First Nine Months

	Per Cent of Operating Revenues		
Road	1929	1930	1931
Atchison, Topeka & Santa Fe	20.6	21.8	15.6
Atlanta, Birmingham & Coast	27.0	26.6	26.6
Atlantic Coast Line	19.8	21.8	15.8
Baltimore & Ohio		16.5	13.9
Bangor & Aroostook		30.2	25.8
Boston & Maine	23.2	21.2	17.0
Buffalo, Rochester & Pittsburgh	22.8	23.6	18.0
Central of Georgia		17.5	15.9
Central of New Jersey	22.6	20.6	17.6
Chicago & Alton	22.8	23.0	18.2
Chicago, Burlington & Quincy	22.4	20.8	15.2
Chicago Great Western	21.2	15.4	16.5
Chicago & Illinois Midland		20.4	21.0
Chicago, Indianapolis & Louisville	17.6	16.5	17.4
Chicago, Milwaukee, St. Paul & Pacific	21.0	21.0	17.4
Chicago, Rock Island & Pacific	24.0	22.6	15.5
Columbus & Greenville	23.4	23.4 25.2	12.8 24.0
Delaware, Lackawanna & Western		37.8	14.7
Denver & Rio Grande Western	22.3	21.4	19.5
Detroit, Toledo & Ironton		13.0	12.2
Great Northern.	* * *	27.1	21.6
Illinois Central	22.6	18.2	20.2
Lehigh & New England	16.6	19.0	
Louisville & Nashville	18.7	18.7	15.5
Minneapolis & St. Louis	15.2	20.0	17.0
Minneapolis, St. Paul & Sault Ste. Marie.	18.6	23.0	19.4
Missouri-Kansas-Texas	18.7	17.6	10.7
Missouri Pacific		22.4	17.8
Mobile & Ohio		17.6	14.9
Montour	* * *	21.8	17.4
Nashville, Chattanooga & St. Louis		23.4	20.6
New York Central Lines	28.2	20.8	16.2
New York, Chicago & St. Louis	14.0	23.3	19.4
New York, New Haven & Hartford	14.8	13.7 14.6	11.4 8.3
Northwestern Pacific	18.7	18.0	14.5
Pere Marquette	10.7	25.0	20.6
Pittsburg & Shawmut		20.0	20.0
Pittsburg, Shawmut & Northern	23.6	25.0	16.0
St. Louis-San Francisco	20.0	19.4	11.9
St. Louis Southwestern	23.4	24.5	10.7
Seaboard Air Line		21.4	25.4
Southern		17.8	18.6
Southern Pacific	17.8	16.5	16.0
Spokane, Portland & Seattle	22.6	25.6	18.4
Tennessee Central	24.0	24.4	20.0
Texas & New Orleans	20.8	22.4	15.6
Union Pacific	22.6	21.8	23.1
Western Pacific	220	32.0	46.9
Wheeling & Lake Erie	33.0	16.3	11.4

ports received thus far from carriers are fragmentary, but indicate a reduction of about 10 per cent from the corresponding values in 1930, and 20 per cent from the value of stock on hand in 1929. Based on these reports, the investment in materials and supplies at the end of 1931 was approximately \$45,000,000 less than in 1930, and approximately \$85,000,000 less than the corresponding value in 1929, giving the lowest investment in unapplied materials in money value since the War began.

Purchases amounted to approximately \$45,000,000 during November, 1931, according to the reports re-ceived thus far from representative carriers. This sum, which does not involve expenditures for equipment or supplies acquired indirectly through contractors, included approximately \$17,200,000 for fuel, \$2,800,000 for rails, \$2,500,000 for ties, and \$22,500,000 for other materials. While these purchases were about \$25,200,-

000, or 36 per cent, below purchases in November, 1930, and \$78,100,000, or approximately 62.5 per cent, below purchases in November, 1929, the total for November, judging from preliminary figures, was less than 5 per cent below the sum spent in September, 1931, and practically on a par with expenditures in October, 1931. It is the first time in months that purchases were not less than those of the previous month. The figures for November show substantial increases in expenditures

### R. B. A. Urges Loans For Railroad Improvements

(Continued from page 85) in which the railroad provision may be broadly interpreted. We are, moreover, in the position of not knowing what amendments may be made after the hearings close. We understand that Senator Couzens has proposed dealing with railway credit separately by reviving Section 210 of the Transportation Act. From the revolving fund created by that post-war provision, loans were authorized specifically including amongst the purposes of the applicant 'to meet its maturing indebtedness or to provide itself with equipment or other additions and betterments.' If the pending credit provision is to be made separately for railways we hope the language quoted next above or its equivalent will be retained.

"Your attention is invited to fundamental differences between the type of federal cooperation contemplated in this appeal and in other proposed forms of government

relief to unemployment:

1. Railway improvements create not government property but private property, which can and will be

2. Instead of burdening the public with bond interest, sinking fund payments and upkeep of the property created, railway indebtedness if the capital be raised by government loan will be repaid, principal and interest, and the railway improvements will effect permanent economies in operating costs. Such economies, after covering the new debt charges, will leave a margin of increase in net earnings. The result will be a favorable influence upon rate development, quality of service and ability to pay wages. All concerned will benefit in the long run. The immediate consequence will be employment and purchases on such a scale as to be an important if not a decisive factor in general business recovery.

"Few realize the significance of quickening the me-chanical progress on our railways. These industries on whose behalf you are addressed maintain laboratories for constant experiment. Well-tested inventions are first 'made standard' on a few of the most progressive systems. The installation is gradual over a period of years. Some systems advance less rapidly than the

leaders. Many lag behind the average.

"The progress in economy in 1930 over 1920 may be measured in terms of freight operating expenses per 1,000 ton-miles. The spread between systems in respect to progress for economy is strikingly manifest in 10-year comparisons. Of 46 leading systems the 10 showing the best record at the beginning of the decade averaged \$7.06, and the 10 of highest cost averaged more than twice as much, or \$15.76. How much re-

(Continued on page 92)

# Lyman Delano Elected Chairman of Atlantic Coast Line

Successor to the late Henry Walters had been executive vice-president since March, 1920

YMAN DELANO, executive vice-president of the Atlantic Coast Line since 1920, has been elected chairman of the board of directors to succeed the late Henry Walters who had held the position for nearly 30 years prior to his death on November 30, 1931, at the age of 83. Mr. Delano also succeeds Mr. Walters in the chairmanship of the Louisville & Nashville. A biographical sketch of Mr. Walters' career was published in the Railway Age of December 5, 1931, page 869; it outlined the manner in which the Atlantic Coast Line under Mr. Walters' leadership emerged as one of the dominant railway systems of the South, a growth which the Railroad Gazette of October 3, 1902, characterized as "one of the remarkable incidents of the recent era of consolidation and re-arranging.

The problems facing Mr. Delano will be somewhat different from those which his predecessor encountered in di-

recting the development and co-ordination of a great railroad system during more than a quarter-century of rapidly expanding traffic and revenues. Mr. Delano assumes leadership of the Atlantic Coast Line at a time when railways, along with nearly all other industries, are staggering from the cumulative effects of blows dealt by the current business depression which has continued unabated since the fall of 1929. The immediate problem of every railway executive is therefore to devise means of meeting the drastic declines in traffic and revenues which have attended this depression.

That the Atlantic Coast Line has already made a remarkable showing in meeting these problems is evident from an examination of comparative statistics of its revenues, expenses and operating performance. The decline in revenues on the Atlantic Coast Line had in fact commenced before the inception of the current depression; since 1926 declines have been reported each year, save 1929, in the successive annual reports. In 1926 the gross revenue of the Atlantic Coast Line Railroad Company was reported as \$97,086,517; this dropped \$16,660,220 to \$80,426,296 in 1927 while in 1928 a further drop of 11.23 per cent to \$71,393,174 was reported. In 1929 there was a slight increase, amounting to 1.37 per cent over the 1928 figure, but in



Lyman Delano

1930 there came the 12.92 per cent decline from the previous year, bringing gross revenues down to \$63,019,957 as against the 1926 figure of \$97,086,517, a decline of more than 35 per cent in four years. This trend was met with a program of operating expense control which brought costs down in a manner paralleling the gross revenue decline. Operating expenses in 1926 totaled \$70,701,770; by the close of 1930 they had been reduced to 70 per cent of this 1926 figure and stood at \$49,685,460.

But even the foregoing record was bettered by the achievements in expense control which accompanied the further decline of traffic during 1931. For the first ten months of the past year the Atlantic Coast Line reported gross operating revenues of \$46,603,135 as against a comparable 1930 figure of \$52,623,963. This \$6,020,828 decline in gross was met by a \$4,739,182 saving in operating expenses so that the

operating ratio for the first ten months of 1931 was held down to 79.3 or only one-tenth of one per cent greater than the comparable 1930 figure of 79.2. Mr. Delano, as executive vice-president, has played a leading role in these managerial achievements which have guided the Atlantic Coast Line through this major business depression; the immediate problems of his chairmanship will be along the same lines.

Lyman Delano was born at Newburgh, N. Y., on January 16, 1883, and was graduated from Harvard in 1906 with the degree of A.B. Upon his graduation from college Mr. Delano entered the employ of Stone & Webster and remained with this engineering firm until 1910 when he entered railway service with the Atlantic Coast Line. During 1910 Mr. Delano was clerk in the chief roadway accountant's office and assistant to chief engineer; during the following year he served as assistant to general superintendent of transportation and from January, 1912, to November, 1914, he was assistant to the president. On the latter date he became third vice-president, in which position he remained for about two years before his promotion to first vice-president. In June, 1918, Mr. Delano became federal manager of the Atlantic Coast Line and several of its subsidiaries and served in that capacity until March 1, 1920, when he was elected executive vice-president.

# Freight Car Loading

WASHINGTON, D. C. EVENUE freight car loading for the 52 weeks ended December 26 amounted to 37,272,371 cars, the lowest total for any year since the compilation of these figures for the roads as a whole was begun. This compares with 45,877,974 cars in 1930, 52,827,925 cars in 1929 and 51,589,887 cars in 1928. The total for the week ended December 26, which included the Christmas holiday, was only 441,589 cars, a reduction of 94,703 cars as compared with the corresponding week of 1930 and of 197,800 cars as compared with 1929. For the week ended December 19 the total was 581,733 cars, a reduction of 132,132 cars as compared with the corresponding week of 1930 and of 261,042 cars as compared with 1929. The summaries, as compiled by the Car Service Division of the A.R.A., follow:

		•	
Revenue	rreight	Car	Loading

Week ended Saturday   December   26, 1931   1930   1929	Kevenue Treight	Car Load	6	
Total All Roads.         441,589         536,292         639,389           Commodities         20,514         26,667         31,584           Live Stock.         13,439         17,625         17,220           Cola         89,644         117,457         135,950           Coke         4,352         7,638         10,943           Forest Products         13,707         20,695         27,837           Ore         3,605         4,281         6,407           Mdse. L.C.L.         150,441         166,731         187,249           Miscellaneous         145,887         175,198         222,199           December 26.         441,589         536,292         639,389           December 19.         581,733         713,865         842,775           December 26.         441,589         536,292         639,389           December 19.         581,733         713,865         842,775           December 28.         613,534         744,353         922,861           December 5.         636,366         787,072         933,309           November 28.         558,807         701,050         836,310           Cumulative total, 52 weeks.         37,272,371         45,877,	Districts Eastern Allegheny Pocahontas Southern Northwestern Central Western.	1931 101,802 89,011 26,642 65,363 49,088 69,208	1930 121,878 108,026 28,175 78,191 63,475 90,093	151,241 135,715 31,335 86,351 78,066 103,492
Commodities         Commodities           Grain and Grain         Products         20,514         26,667         31,584           Live Stock         13,439         17,625         17,220           Coal         89,644         117,457         135,950           Coke         4,352         7,638         10,943           Forest Products         13,707         20,695         27,837           Ore         3,605         4,281         6407           Mdse         L.C.L         150,441         166,731         187,249           Miscellaneous         145,887         175,198         222,199           December 26         441,589         536,292         639,389           December 19         581,733         713,865         842,775           December 12         613,534         744,353         922,861           December 5         636,366         787,072         933,309           November 28         558,807         701,050         836,310           Cumulative total, 52 weeks         37,272,371         45,877,974         52,827,925           Week Ended Saturday, December         19, 1931         1930         1929           Eastern         131,286         158,517<	Total Western Districts	158,771	200,022	234,747
Grain and Grain Products         20,514         26,667         31,584           Live Stock         13,439         17,625         17,220           Coal         89,644         117,457         135,950           Coke         4,352         7,638         10,93           Forest Products         13,707         20,695         27,837           Ore         3,605         4,281         6,407           Mdse. L.C.L.         150,441         166,731         187,249           Miscellaneous         145,887         175,198         222,199           December 26         441,589         536,292         639,389           December 19         581,733         713,865         842,775           December 26         636,366         787,072         933,309           November 28         558,807         701,050         836,310           Cumulative total, 52 weeks         37,272,371         45,877,974         52,827,925           Week Ended Saturday, December 19, 1931         1930         1929           Eastern         131,286         158,551         182,378           Allegheny         112,521         138,738         174,875           Pocahontas         36,666         44,260		441,589	536,292	639,389
December   19.   581,733   713,865   842,775     December   12.   613,534   744,353   922,861     December   5.   636,366   787,072   933,309     November   28.   558,807   701,050   836,310     Cumulative total, 52 weeks.   37,272,371   45,877,974   52,827,925     Week Ended Saturday, December   19, 1931   1930   1929     Districts   1931   1930   1929     Eastern   131,286   158,551   182,378     Allegheny   112,521   138,738   174,875     Pocahontas   36,666   44,260   57,696     Southern   90,664   111,968   132,717     Northwestern   66,751   83,984   97,324     Central Western   91,803   114,226   127,353     Southwestern   52,042   62,138   70,432     Total Western Districts   210,596   260,348   295,109	Grain and Grain ProductsLive StockCoal Coke Forest Products Ore Mdse. L.C.L.	13,439 89,644 4,352 13,707 3,605 150,441	17,625 117,457 7,638 20,695 4,281 166,731	17,220 135,950 10,943 27,837 6,407 187,249
Week Ended Saturday, December 19, 1931         1931 1930 1929           Districts         1931 131,286         158,551 182,378           Eastern         131,286 158,551 182,378         182,378           Allegheny         112,521 138,738 174,875         182,378           Pocahontas         36,666 44,260 57,696         57,696           Southern         90,664 111,968 132,717           Northwestern         66,751 83,984 97,324           Central Western         91,803 114,226 127,353           Southwestern         52,042 62,138 70,432           Total Western Districts         210,596 260,348 295,109	December 19	581,733 613,534 636,366	713,865 744,353 787,072	842,775 922,861 933,309
Districts         1931         1930         1929           Eastern         131,286         158,551         182,378           Allegheny         112,521         138,738         174,875           Pocahontas         36,666         44,260         57,696           Southern         90,664         111,968         132,717           Northwestern         66,751         83,984         97,324           Central Western         91,803         114,226         127,353           Southwestern         52,042         62,138         70,432           Total Western Districts         210,596         260,348         295,109	Cumulative total, 52 weeks3	7,272,371	45,877,974	52,827,925
	Districts Eastern Allegheny Pocahontas Southern Northwestern Central Western. Southwestern	1931 131,286 112,521 36,666 90,664 66,751 91,803 52,042	1930 158,551 138,738 44,260 111,968 83,984 114,226 62,138	182,378 174,875 57,696 132,717 97,324 127,353 70,432
				-

Commodities	1931	1930	1929
Grain and Grain Products	28.412	36.053	36,195
Live Stock		22,747	24,416
Coal		161,503	199,669
Coke	5,518	8,492	11,365
Forest Products	18,085	31,318	48,771
Ore	4,223	5,743	8,794
Mdse. L.C.L	191,742	210,278	228,536
Miscellaneous	192,801	237,731	285,029

The freight car surplus for the week ended December 14 averaged 671,402 cars, an increase of 6,633 cars in a week. This included 362,487 box cars, 236,280 coal cars, 29,612 stock cars, and 14,133 refrigerator cars.

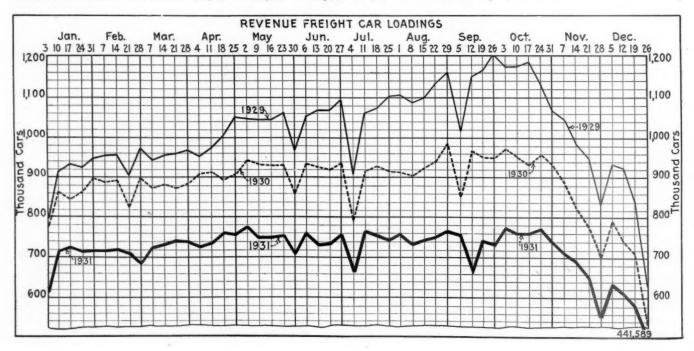
#### Car Loading in Canada

Revenue car loadings at stations in Canada for the week ended December 26 totaled 31,258 cars, a decrease of 11,378 cars from the previous week and a decrease of 3,797 cars from the same week last year. In the week ended December 19 the total was 42,636.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada		
December 26, 1931	31,258	18,217
December 19, 1931	42,636	21,639
December 12, 1931	45,377	21,954
December 27, 1930	35,055	23,097
Cumulative totals for Canada		
December 26, 1931	2,570,520	1,291,418
December 27, 1930		1,698,536
December 28, 1929	3.524.019	2.087,948

Car loadings for the 52 weeks ended December 26 amounted to 2,570,520 which was a decrease of 575,727 cars from the 1930 total and of 1,124,895 cars from the high record made in 1928. Loadings in the eastern division were 373,170 less than for last year and have been light quite consistently throughout the year. In the western division the decrease was 202,557 cars.

Miscellaneous freight showed a decrease of 152,195 cars, or 19 per cent and merchandise a decrease of 127,238 cars, or 14 per cent. An encouraging feature of merchandise loadings has been the slight but more or less continuous improvement in the index numbers since the first of September. The greatest rates of decrease were 44 per cent, or 42,870 cars, in ore and 43 per cent, or 55,382 cars, in pulpwood. Grain was up 18,659 cars at the middle of July but at the close of the year amounted to 382,992 cars, or 54 per cent under last year's total. Live stock was up by 2,373 cars in the western division but down by 8,788 cars in the eastern division, coal decreased by 60,116 cars, lumber by 44,050 cars and coke by 3,318 cars.



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# Four-System Plan Hearings

WASHINGTON, D. C.

EFERRING to railroad consolidation as an important feature in the preservation of private ownership and as necessary at this time to carry out one of the most important purposes unsuccessfully sought to be accomplished by the Transportation Act of 1920, Daniel Willard, president of the Baltimore & Ohio, on January 6 urged the Interstate Commerce Commission to act as promptly as possible to approve the four-system plan for grouping the eastern railroads, exclusive of New England, in place of the fivesystem arrangement proposed in its own consolidation plan of 1929. Mr. Willard's testimony was given in a general statement on behalf of the four principal eastern railroads at the opening of the hearing before Chairman Porter and Examiner Koch of the commission on the application of the Baltimore & Ohio, Chesapeake & Ohio, New York Central and Pennsylvania for a modification of the commission's plan to provide for the incorporation in it of the four-system grouping.

"This question should be settled before business recovers, so that we can proceed without uncertainty," he said. "Granting of our application will end harmful uncertainty, tend to release credit and settle many

troublesome questions."

Mr. Willard was preceded by R. S. Marshall, vicepresident of the Chesapeake & Ohio, who identified and explained a series of maps and statistical exhibits prepared on behalf of all four applicants, giving comparisons of the earnings, traffic, mileage, etc., of the four systems as now constituted and as proposed. He was to be followed by J. J. Bernet, president of the Chesa-peake & Ohio, W. W. Atterbury, president of the Penn-sylvania, P. E. Crowley, until January 1 president of the New York Central, and other officers of the four roads. It was expected that the direct testimony of the applicants would be completed this week, to be followed by cross-examination and testimony on behalf of protestants or those having objections to certain features of the four-system plan.

One of Mr. Marshall's exhibits compared the total operated mileage of the proposed systems as follows: New York Central, 13,043; Pennsylvania, 17,444; Baltimore & Ohio, 12,003; Chesapeake & Ohio Nickel Plate, 13,852. It was shown that cities of 50,000 or more having a total population of 19,905,543 would be served by

all four systems.

Mr. Willard also said in part:

The four systems seemed more logical to me than greater number because there are about 56,000 miles of rail-road in the Eastern region and we found that under any practicable solution of the problem nearly half of that mileage practicable solution of the problem nearly half of that mileage seemed certain to be found ultimately in the systems of the Pennsylvania and the New York Central Companies. That would leave about 26,000 to be merged into other companies. Obviously if it were put into more than two companies the mileage of each company must be substantially less than the mileage of the New York Cent at or Pennsylvania where the same total mileage was divided by two. And if we were to have systems in the East of substantially the same size—and we did not consider mileage itself controlling—but we did consider important the giving to each of the proposed systems as nearly as possible the same opportunities to secure trathe, which question is more or less related to milewnich question is more or less related to mileage and which means that each system in a general way should reach the same markets and the same points of origin. If we were to have systems with something approaching equal opportunity to secure and deliver traffic we found that with the mileage available we could not have more than four and so we proceeded to develop a plan based on the four-

At this point I should like to summarize briefly the objects which we had hoped to accomplish and now hope to accomplish by the present plan and which ought to be ac-

complished through this policy of consolidation. The systems should be strong, that is to say in a position to obtain the necessary funds for additions and betterments and equipment at the lowest possible cost. They should be efficient—neither so large as to be unwieldy or unmanageable, nor too small to secure economies derived from large scale operations and be enabled to make the best possible use of rolling stock, yards and terminals so as to avoid congestion of transporta-tion on the one hand and idle facilities on the other, and meet the transportation demands at the lowest possible cost. Also the systems should be well balanced, namely, have a reasonable opportunity to originate well diversified and dependable traffic from which follows an assurance of continuity of revenue so that the depression in a single industry will not too greatly affect the total traffic handled by any single carrier. The systems should also be well balanced with each other, by which I mean that they should be competitively important in free transfer and delivery which will enable them to give service comparable to that afforded by competitors and be able to hold their own with the other systems proposed and serving the same territory.

I think what I have already said indicates our view that the inability or failure to agree upon a complete plan which would command the support of the railroads and thus furnish

would command the support of the railroads and thus furnish a starting point toward the accomplishment of the policy of consolidation was detrimental to the railroads themselves and to the public at large. It seemed at first that the complete plant of the commission had furnished this starting point but as a matter of fact no real progress was made under it be-cause of the fact that it provided for five systems in the Eastern district, and if any one of those five systems could not be made effective it necessarily followed that a number of important railroads in the Eastern district would remain unprovided for or unallocated to any major system. as I have been able to ascertain no one has been able to elicit financial backing to assure System No. 7—Wabash-Seaboard. Since then both the Seaboard and the Wabash Railroads have passed into the hands of receivers, a situation which creates additional difficulties for System No. 7 as proposed in the "Complete Plan."

But there are in our view other reasons which we believe to be sound, which suggest that if System No. 7—Wabash-Seaboard—should actually come into existence it is improbable that a system so constituted would fulfill the requirements and purposes of the statute or be able to live in competition with the other and stronger systems in the eastern territory.

For the reasons which I have given and which will be amplified by other witnesses who will speak upon the subject System No. 7—Wabash-Seaboard—seems to us impraction. ticable and undesirable. Holding that view it seemed obvious that if progress was to be made in consolidation there should be a resumption of the conferences between the four principal trunk line carriers in an effort to reach a complete agreement for prompt submission to the commission for its consideration and which, if agreed upon, might suggest to the commission the desirability of a modification of its complete plan so as to permit of the carrying out of such plan as might be agreed upon by the carriers and approved by the commission. In addition to the reasons which suggested the desirability of accomplishing some real progress in consolidation added incentive was given through conditions in this country which developed during the year 1930 and which have since become still more acute and troublesome. It hardly seems necessary for me to elaborate upon those conditions for they are well known to all and undoubtedly influenced the commission in what it said in its recent rate decision as to the prospect of relief which could be obtained both by co-operation and by consolidation. The conferences between the Baltimore & Ohio, New York Central, Pennsylvania and Chesapeake and Ohio-Nickel Plate were therefore resumed and resulted in the agreement evidenced by the letter which was sent to the commission dated Jan. 2, 1931.

The plan for the four systems set out in the application represents in the judgment of the representatives of the four principal carriers the best practicable solution for consolidation in the Eastern district. And having back of it, as it has, the agreement of the four principal railroads to carry it out, it gives the greater promise toward as prompt an accomplishment of the policy of consolidation as is possible. I need hadly say that the sincerity of their agreement to proceed in carrying out the plan if approved by the commission receives further out the plan if approved by the commission receives further support from their belief that under present trying conditions even greater benefits and advantages are possible from it than perhaps were at first appreciated.

While it may be that groups differently composed might be suggested, the groups which will result from the suggested modification of the commission's complete plan are the only

groups on which an agreement could be reached and the natural differences of opinion reconciled and which would have concerning consolidation the effective support of the agreement of the four trunk line carriers. It is my belief that the systems will substantially comply with the purposes and requirements of the congressional policy.

The four-system plan provides for the allocation of substantially all of the carriers, large and small, in the eastern territory. Each of those systems will have adequate main stems between the Atlantic seaboard and the middle west and have direct routes between important cities and industrial centers. All of routes between important cities and industrial centers. All of the principal producing, consuming and population centers of the eastern territory, excluding New England, will be served by two or more of the proposed systems and in many instances by all of the systems. They will each have access to sources of fuel supply and also participate to a large extent in the commercial distribution of coal. Each of the four proposed systems will have access to at least two of the five principal north Atantic ports and no one of these principal ports will be without competitive service. They will also have substantial access to the lower Great Lakes ports, Ohio river crossings and Lake Michigan ferry routes and thus be enabled to participate in the transportation of a large volume of traffic passing through and over them. The four systems will also, I believe, have assurance of diversified traffic and stable revenues and the necessary physical and financial strength to provide the most economical service to the public.

It is of course obvious that the creation of a limited number of systems in comparison with an unlimited or greater number

of systems in comparison with an unlimited or greater number results in an inability to provide competition by the same number of independent transportation units as before. But these four systems will be well articulated and reasonably balanced one with the other and thus will assure a greater amount of effective and economic competition than would be possible in the eastern district through a greater number of less well rounded systems.

rounded systems

Mr. Willard then proceeded to discuss various features of the proposed plan and gave a separate statement dealing more particularly with the B. & O. Referring to the protests that have been filed against inclusion of the Chicago, Indianapolis & Louisville Railway in the Baltimore & Ohio system he said he had more than once stated to the president of the Monon and to the two principal owners of the Monon that it was not the intention of the Baltimore & Ohio to take any steps toward changing the present ownership status of that road until and unless the owners of that property were

Referring to the objections of the Delaware & Hudson, Mr. Willard said he would be satisfied with an independent status for that road but that it did not seem practicable to prepare a plan for the eastern district and leave out so important a line. He said he would oppose assigning the D. & H. to a New England system or any other system and that it seemed best that it should be jointly controlled unless it desired to remain independent. If it does, he said, there is nothing in the law to

prevent it.

At the conclusion of Mr. Willard's testimony, L. E. Jeffries, vice-president and general counsel of the Southern, asked him to identify several copies of letters between Mr. Willard and H. R. Kurrie, president of the Monon. As Mr. Jeffries resumed his seat he toppled back in his chair and was soon pronounced dead

of a heart attack.

A large number of intervening petitions have been filed with the commission by chambers of commerce, traffic bureaus, state authorities and a few railroads, objecting to various features of the plan on more or less local grounds. Most of the petitions have been filed by commercial organizations and state commissions in the South supporting that filed by the Chicago, Indianapolis & Louisville, the Southern, and the Louisville & Nashville against the proposed allocation of the Monon to the Baltimore & Ohio on the ground that it would place an important route between the Southeast and central territory in the control of an eastern line. The state of Virginia objected to the allocation of the Norfolk & Western, Chesapeake & Ohio or the Vir-

ginian to any larger system and asked that the N. & W. 'pried loose" from the Pennsylvania and that the C. & O. be divorced from the Erie. Five governors of New England states filed objections to the plan while the governor of Rhode Island and commercial interests of that state expressed general approval but desired the extension of the proposed systems into New England. The Traffic Bureau of Nashville objected to the allocation of the Chicago & Eastern Illinois to the Chesapeake & Ohio. The Syracuse Chamber of Commerce objected to the assignment of the Delaware, Lackawanna & Western to the New York Central. The Delaware & Hudson has filed an objection to the entire plan.

### R. B. A. Urges Loans For Railroad Improvements

(Continued from page 88)

mains to be done on the railways as a whole is clear from the strides made in the 10 years. It is true that the highest-cost 10 roads of 1920 advanced relatively Their gain in 1930 over 1920 averaged 39.4 per Nevertheless the lowest-cost 10 averaged a further reduction of 14 per cent. Another test is gross ton-miles per train-hour, by which the top 10 systems in 1920 advanced 70.7 per cent, and the bottom 10 102.3 per cent. The scope of such progress is illustrated by fuel cost-pounds of fuel per 1,000 gross ton-miles. The 10 systems of lowest fuel consumption in 1920 had it down in 1930 another 25.4 per cent, while the 10 of highest consumption in 1930 reduced it in the 10 years by 34.1 per cent. Operating economy is accomplished by improvements in locomotives, cars, roadway, signals, yards and all the material and supplies used in them. If no new invention were offered in the next five years billions of capital could yet be profitably applied in spreading the use of devices already to some degree installed on the most progressive roads.
"'Many of these changes,' says the Interstate Com-

merce Commission in its last annual report, 'will require expenditures of capital.' The rate of progress largely depends upon the financial resources of the individual system. Many projects combine in one transaction capital and replacement. This is the kind of projects which Mr. Willard says must cease if capital is not found. Cutting to the bone during depression all outlays for simple replacement not involving capital input, postponing enlargement of plant until the traffic outlook is more promising, the railroads are justified nevertheless in progressive improvements for operating economy, which can be made now at exceptionally low

"The Interstate Commerce Commission has recently afforded the railways various opportunities to increase revenues through rate adjustment. Negotiations with labor organizations promise reduction in expenses through wage cuts. But because refunding operations will exhaust and more all available credit, what is required in addition is access to new borrowings. Reconstruction Finance Corporation, if its authority affecting railroads is kept comprehensive in the final draft of the measure and also in its administration, will promote business recovery not alone by preventing receiverships through aid in refunding maturities, but by providing capital to be put with expected earnings in improvements for economy-a fountain of wages nationwide and in every way a perpetual source of public advantage."

# NEWS

# President Urges Action on Relief Legislation

Unexpected message to Congress asks early enactment of pending measures

In an unexpected message to Congress on January 4, President Hoover again appealed for prompt action on the principal proposals for economic relief which he had recommended in his message upon the opening of the session, on December 7, including those relating to the railways and transportation, saying that "the need is manifestly even more evident" than at the date of his message a month ago, and that "I should be derelict in my duty if I did not at this time emphasize the paramount importance to the Nation of constructive action upon these questions at the earliest possible moment." Pointing out that these proposals have no partisan character he said: "We can and must replace the unjustifiable fear in the country by confidence."

Among the principal subjects requiring immediate action the President mentioned the creation of the Reconstruction Finance Corporation, on which hearings were held before a sub-committee of the Senate banking and currency committee in December and which he had been assured by congressional leaders would be taken up immediately after the holidays; but at the time he spoke estimates were being made that it might take a month to get the bills through both the House

and the Senate. Creation of this corporation, he said, would "give confidence to agriculture, industry, and labor against further paralyzing influences." He also mentioned various banking proposals, tax increases, and "revision of the laws relating to transportation, in the direction recommended by the Interstate Commerce Commission," which he said "would which he said "would strengthen our principal transportation systems and restore confidence in the bonds of our railways." These bonds, held largely by insurance companies, savings banks and benevolent trusts are "therefore the property of nearly every family in the United States"; and he added that the railways are the largest employers of labor and purchasers of

As in his original message, however, the President refrained from specifying any of the commission's recommendations in particular, although in the annual message he did recommend regulation of transportation which is in competition with the railways.

Many of the commission's recommendations referred to subjects which have been considered more or less by Congress for several years, but at the time of the special message bills covering the most important ones had not even been introduced.

On the day following the special message the House committee on interstate and foreign commerce decided to begin hearings next week on the Rayburn bill to increase the commission's authority over acquisitions by holding companies; and it is understood that the commission has drafted for the committee a bill to carry out its recommendations for an investigation of competing forms of transportation.

"Action in these matters by Congress," the President said, "will go far to reestablish confidence, to restore the functioning of our economic system, and to rebuilding of prices and values and to

quickening employment.'

On January 5 the Senate committee on banking and currency responded to the President's appeal for haste by speeding up its consideration of the sub-committee report on the Finance Corporation bill and reported it favorably to the Senate with a view to beginning consideration of the bill in that body on Wednesday. Immediate consideration of the bill, however, was blocked by Senator Blaine. An amendment was inserted to provide that the loans to railroads by the corporation shall be made only on certification by the Interstate Commerce Commission. At the same time the House committee began hearings on the bill but agreed to expedite matters by omitting dublication of the testimony taken by the Senate subcommittee.

The House committee on interstate and foreign commerce also announced its intention of taking up the Interstate Commerce Commission's proposal for a revision of Section 15a and its other recommendations after the hearings on the holding company bill. The commission has submitted drafts of bills to carry out all its recommendations, including two substitutes for Section 15a.

A joint investigation by the Interstate Commerce Commission and the Shipping Board into the extent and practicability of the equalization of ocean and rail freight rates as between the various ports of the United States is proposed in a resolution, H. J. Res. 157, introduced in the house by Representative Luce, of Massachusetts.

A bill to authorize the Secretary of the Treasury, with the approval of the Interstate Commerce Commission, to compromise or exchange any indebtedness of a railroad in receivership to the federal government under Section 210 of the transportation act has been introduced in Congress by Representative Colton, of Utah as H. R. 6582.

# Conferences on Wages at Chicago on Jan. 14

Railway and labor committees fix date for joint meeting on proposed cut

In accordance with the proposal of the Railway Labor Executives' Association made at a meeting in Washington, D. C., on November 2, committees representing railroad employees and managements will meet at Chicago on January 14 to negotiate wage reductions and to consider other allied matters. This date was selected following a meeting of the Railway Labor Executives' Association in Cleveland, Ohio, on December 29, at which time the association decided to call the brotherhoods' 1,500 general chairmen to meet in Chicago on January 12 in advance of the presidents' conference to determine upon a policy for the January 14 meeting. The railroads will be represented by J. J. Pelley, New York, New Haven & Hartford; C. E. Denney, Erie; L. A. Downs, Illinois Central; J. E. Gorman, Chicago, Rock Island & Pacific; L. W. Baldwin, Missouri Pacific; C. A. Wickersham, Atlanta & West H. D. Pollard, Central of Georgia; and A. C. Needles, Norfolk & Western, under the chairmanship of Daniel president of the Baltimore & Ohio.

While waiting for the final negotiations several railroads have made agreements with their employees. The wage controversy between the Chicago & North Western and the Brotherhood of Maintenance of Way Employees, wherein the railroad notified the employees on December 7 of its intention to reduce wages 15 per cent, and the union ordered the taking of a strike ballot, was settled on December 24, when both agreed to postpone any action until after the meeting on January 14. The agreement precludes a strike of the maintenance of way workers, a majority of whom had voted approval of a walkout. The 5,000 employees, whose wages had been cut approximately 10 per cent on October 6, were restored to the old scale.

The first acceptance of wage reductions by employees occurred on December 29, when 15,000 shopmen of the Southern Pacific, Pacific lines, accepted a 10 per cent cut. This agreement provides that irrespective of what percentage reduction may be agreed upon with other organized employees, the shopmen's wages shall not be cut to exceed 10 per cent and that if other pay cuts are smaller, the shopmen's reduction shall be brought to a corresponding level, with adjust-

(Continued on page 98)

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### Engineman John Draney of Lackawanna Retires

Widely-known locomotive engineer completes nearly 59 years of railway service

Thursday, December 31, was John Draney's last day at the throttle of the Lackawanna Limited. He had piloted this famous D. L. & W. train between Scranton, Pa., and Hoboken, N. J., during the closing 16 years of the halfcentury which he served this railroad as engineman. Thus the passing of the old year saw the passing from active service of a railroad man who was able to combine a career of faithful and active service in the ranks with a position of prominence in the railroad world which it is vouchsafed to few to attain.

John Draney is widely known, admired and respected by railway workers, executives and leaders in all walks of life. This confidence of all which he enjoys was manifest in 1922 when President Coolidge summoned him to Washington for conferences on a threatened railway strike. When President McKinley was assassinated in Buffalo, N. Y., in 1901 and the Lackawanna was chosen to take the late Dr. Janeway from New York to Buffalo, Engineman Draney broke all previous records for time between the two points and made a record which still stands. During his career as engineman Mr. Draney had several famous persons ride with him in the locomotive; among these was Theodore Roosevelt when Mr. Roosevelt was Governor of New York.

Mr. Draney has for several years taken an active interest in the organization and work of railway veterans' associations. He has been president of the Lackawanna Veterans' Association since 1921 and in addition played a leading part in the organization of the Erie Railroad Veterans' Association, the Delaware & Hudson Veterans' Association, the Ontario & Western Railway Veferans' Association and the Lehigh & Hudson River Railway Veterans' Association. He plans now to devote more time to this work.

John Draney entered railway service on May 1, 1873, as a water boy and after working as laborer and car oiler he was successively, until 1889, steam shovel fireman, steam shovel engineman and roundhouse foreman. From 1889 until his retirement on December 31, 1931, Mr. Draney was locomotive engineman. In announcing his retirement the Lackawanna said: "His loyalty to his officers, fellow employees and the traveling public, and pride in his work have been outstanding and built up for him a great following of admirers in many walks of Appropriate ceremonies marked his last run between Scranton and Hoboken on December 31. The locomotive was decorated for the occasion and all along the route railway officers, fellow workers and townspeople were on hand to express their good wishes.

Mr. Draney, in addition to his associa-

tion with the veteran organizations, is a member of the New York Railroad Club and of the Metropolitan Track Supervisors' Association; he is the possessor of a 40-year membership badge in the Brotherhood of Locomotive Engineers



John Draney

and was also the recipient, in 1914, of an award of merit by the Lackawanna for safety exercised in the operation of his

#### Mixed Shipments at C. L. Rates Between Chicago and Milwaukee

The Chicago & North Western and the Chicago, Milwaukee, St. Paul & Pacific will, on February 5, establish new rates on mixed small lot freight shipments between Chicago and Milwaukee, Wis., 85 miles, on a scale lower than present less-than-carload rates, the new rates to apply on merchandise moving between one shipper and one consignee. Under the new arrangement it will be possible for a shipper who has been transporting his goods under l.c.l. rates and packing requirements, to ship a mixed carload of commodities under the proposed carload rates. Three different rates will be put into effect: The first with a 10,000 lb. minimum applies between team tracks in Milwaukee and team tracks in Chicago and is 22 cents per 100 lb. The second with a 25,000 lb. minimum, is between on-line industries in the two cities and is 20.5 cents per 100 lb. The third, with a 40,000 lb. minimum, is between industries on connecting lines in the two cities and is 19 cents per 100 lb. Shipments must be made from one shipper in one car in one day for delivery to one consignee at one destination.

The introduction of carload rates on mixed merchandise by the Milwaukee and the North Western follows similar action by the Missouri Pacific on December 4, on merchandise in quantity lots between St. Louis, Mo. and Kansas City, 282 miles. The Missouri Pacific tariff provides for a 10,000 lb. minimum at 70 cents per 100 lb., a 25,000 lb. minimum at 56 cents, and a 40,000 lb. minimum at 45

### Two Substitutes for Section 15a Proposed

Rayburn bills designed to eliminate recapture and to give I. C. C. broader rate discretion

Two bills proposing alternative substitutes for the rate-making rule of Section 15a of the interstate commerce act, designed to eliminate the recapture feature and to give the Interstate Commerce Commission a broader discretion in adjusting rates to allow the railroads an adequate return than what it has referred to as the "impracticable" requirements of the present law, were introduced in Congress on January 6 by Representative Rayburn, chairman of the House committee on interstate and foreign commerce. He said that the two bills had been prepared for purposes of discussion and that the committee proposed to give thorough consideration to the subject, as well as to the other recommendations for legislation made in the commission's annual report.

The first bill is that outlined by the commission in its annual report, which was submitted to the Senate committee last January as a substitute for the Howell bill, and would substitute a "rate base" built up from the pre-war valuations plus later investment for the valuation which is the present base for the fair return percentage. Under it the commission would prescribe a percentage of fair return from time to time but would have discretion to adjust rates in an effort to produce a fair return over a period of years sufficient to provide the roads with adequate credit and for the maintenance of an adequate transportation system at the lowest possible rates consistent there-

The second bill would omit any provision for a percentage of fair return or a rate base but would direct the commission in simple language to endeavor to see that the railroads have an opportunity to earn revenues to constitute 'a sufficient basis for the maintenance of a national system of transportation at all times adequate to the needs of the public." The commission would be directed to maintain its valuation records by keeping account of changes in the investment since the dates of the primary valuations for its general information. Both bills provide for the elimination of recapture after Dec. 31, 1931.

#### The Canadian Roads in November

A decrease in gross revenues of \$1,878,-993, decrease in operating expenses of \$1,889,059 and an increase in net of \$10,-066 for November, 1931, as compared with the same month of 1930, is shown in the monthly report of earnings issued by Canadian National.

Gross revenues for the month of November, 1931, were \$15,290,993. Operating expenses were \$13,206,511 as against \$15,095,570 in November, 1930. Net revenues in November, 1931, were \$2,084,481 as against \$2,074,415 for November, 1930. an increase of \$10,066.

For the eleven months of 1931, to No-

vember 30, gross revenues were \$163,-862,574, a decrease of \$43,180,633 as compared with the same period of 1930. Operating expenses for the 1931 period were \$156,370,574, a decrease of \$24,894,-570, leaving net revenues for eleven months of 1931 of \$7,491,999, a decrease of \$18,286,063.

The Canadian Pacific reports net revenues of \$4,774,625 for November, which shows a comparatively small decrease of \$211,129 from the like month of 1930, which result is principally due to the fact that gross suffered the smallest decline for any month of this year. Gross for the month was \$13,560,582, against \$14,893,308, a reduction of \$1,332,726. Net revenues were \$4,774,625, a reduction of \$211,129 from the \$4,985,754 reported in November, 1930. Expenses were \$1,121,597 lower for the month.

For the eleven months, gross was \$132,-976,238, a reduction of \$35,171,572. In the same period expenses were reduced by \$24,774,904, leaving net for the eleven months \$24,087,291, a reduction of \$10,-396,668 from the like period of 1930.

#### Court Permits Betterment Expenditures on Wabash

United States District Judge Charles B. Davis on December 23 issued an order authorizing the receivers of the Wabash to use available funds for making additions and betterments whenever in their judgment adequate economies in operation will be effected by such expenditures.

#### October Pay Rolls

Class I railways reported a total of 1,-225,399 employees as of the middle of October, and a total compensation of \$171,648,835, according to the Interstate Commerce Commission's monthly statement of wage statistics. Compared with the returns for the corresponding month of last year the decrease in the number was 15.78 per cent while the decrease in compensation was 19.74 per cent.

#### G. M. & N. Proposes Highway Service

The Gulf, Mobile and Northern has filed an application with the Mississippi Railroad Commission for permission to operate a motor transportation company to carry passengers, baggage, express and freight, over routes paralleling its line from the Tennessee-Mississippi state line to the Mississippi-Alabama state line. A hearing on the application was held at Jackson, Miss., on January 5.

#### Another Chicago Terminal Plan

A new plan for the construction of a union railway passenger terminal at Chicago to front on Randolph street a short distance east of Michigan avenue and to be used by all 15 of the railroads now occupying the stations south of the business district has been proposed by James Simpson, chairman of the Chicago Plan Commission. Ernest H. Graham, architect and member of the Plan Commission, has been asked by Mr. Simpson to make a preliminary study of the possibilities of such a plan. The scheme would provide for all railroads except

those occupying the Union and Chicago & North Western stations. The plan is proposed as a substitute for the project of the Illinois Central to establish a passenger terminal at Roosevelt Road.

#### T. P. & W. Offers Free Store-Door Service

The Toledo, Peoria & Western, with the approval of the Illinois Commerce Commission, has filed a tariff with that commission providing for free pick-up and delivery service on l.c.l. freight shipments. This service is to be given by the railroad when requested and is intended to permit the railway to compete with motor truck lines operating throughout its territory.

#### Interstate Rate Adjustments

The Public Service Commission of Pennsylvania has authorized the issuance of freight tariffs, on five days' notice, making emergency freight rates on the basis of those which have been issued for interstate traffic.

The Public Utilities Commission of Massachusetts has authorized the railroads to file freight tariffs of rates based on the recent action of the Interstate Commerce Commission in interstate rates.

#### Shippers Indicted for False Billing

The Interstate Commerce Commission has announced that on December 9 the federal grand jury at Pueblo, Colo., returned an indictment in 15 counts against the Peerless Alloy Company and an indictment in 10 counts against the Interstate Metals Corporation, charging violation of section 10 of the interstate commerce act by falsely billing carload shipments of scrap copper as copper residue, defeating the lawful freight charges by more than \$200 per shipment.

# Indictments For Failure to Assess Demurrage

The Interstate Commerce Commission has announced that the federal grand jury at Detroit on December 10 returned indictments against the Oliver Farm Equipment Company of Battle Creek, Mich., the Michigan Central and the Grand Trunk Western charging that the carriers had held export shipments of thresher combines in transit at Battle Creek for stated periods without assessing demurrage charges.

# F. E. Williamson Takes Over Presidency of New York Central

Frederic E. Williamson, former president of the Chicago, Burlington & Quincy, in taking over his new duties as head of the New York Central Lines at New York on January 4, expressed himself as hopeful of an early and successful conclusion to the negotiations, to be held later this month, for a voluntary reduction in railroad wages. Although an increase in the volume of traffic is the greatest present need of the country's railroads, a wage cut is also essential, Mr. Williamson stated, in aiding the roads to meet the existing emergency situation. Any funds made available in that way would pre-

sumably be spent, he added, so as to increase railway employment and to benefit industry as a whole.

As previously reported in the Railway Age, Mr. Williamson was succeeded on the Burlington by Ralph Budd, former president of the Great Northern, Mr. Budd being in turn succeeded by William P. Kenney, vice-president in charge of traffic of the latter road. All three changes became effective January 1.

#### Fire at N. Y. O. & W. Middletown Shops

Fire of undetermined origin, which destroyed a carpenter shop, a car repair shop and a small adjoining shop, and damaged a large machine shop, caused a loss estimated at \$300,000 at the Middletown, N. Y., shops of the New York. Ontario & Western on January 2. In addition to the financial loss, which was covered by insurance, about 300 employees were thrown out of work as a result of the fire.

#### Boiler of S. P. Locomotive Explodes

Parts of the Locomotive boiler of the Southern Pacific's West Coast Limited were hurled one and one-quarter miles from the tracks when, on December 25, the boiler exploded, killing the engineman and fireman. The passenger train was traveling southward at 25 m.p.h. when the accident occurred near Richvale, Cal. The wheels of the locomotive and tender remained on the tracks, while other parts, as well as the bodies of the engineman and fireman, were thrown through the air. No passengers were injured.

#### Truckers to File Contracts

All motor truck operators in the state of Arkansas who claim to be contract haulers or private carriers, will be required to file with the state Railroad Commission the original contracts under which the hauling is done, according to an announcement by the commission. In many instances, said a member of the commission, where the license permit of a truck operator has been cancelled for failure to observe regulations of the commission, the operator has continued the business, claiming to have entered into private contracts.

## New Materials Handling Institute Is Formed

More than seventy representatives of materials handling equipment manufacturers met at Cleveland, Ohio, on December 8, and formed an organization to be known as the Materials Handling Institute. The object of the institute is to be educational primarily to promote the more extensive use of mechanical handling equipment in the various branches of transportation and industry, and also to create closer cooperation between the various groups engaged in the manufacture of material handling equipment. The following officers of the institute were elected: President, F. E. Moore, Mathews Conveyor Co.; vice-president, H. B. Webb, J. B. Webb Co.; treasurer, H. W. Standert, Northern Engineering Works; Standert, Northern Engineering Works; and secretary, J. A. Cronin, Materials

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Handling & Distribution. In addition to the above executive officers, a board of governors was formed.

#### Stacking Allowance Found Not **Justified**

The Interstate Commerce Commission has found not justified the practice of the Pennsylvania in making an allowance of \$1.50 a car to consignees for the service of stacking and sorting fresh fruits and vegetables in connection with unloading at New York piers, and has ordered the cancellation of the tariff proposing such an allowance, which had been suspended. The report says the allowance had been made for years without tariff authority until it was pointed out by the Bureau of Inquiry, but that the stacking is solely for consignees' benefit.

#### Third Machine Tool Show To Be Held **Next September**

At a meeting at Cincinnati, Ohio, on December 18 the Exposition Committee of the National Machine Tool Builders' Association allotted space to 110 member exhibits which are already planned for the Third Machine Tool Exposition to be held at the Cleveland Public Auditorium from September 10 to 17, inclusive, 1932. This first allotment involves 61,000 sq. ft. of display space and indicates, according to Ralph E. Flanders, manager, Jones & Lamson Machine Company, who is chairman of the association's exhibit committee, that the third exposition will match the second exposition held in 1929. It will probably exceed it in the number of exhibitors and amount of exhibit space.

#### Southern Pacific of Mexico Labor Dispute Ended

The labor dispute between the Southern Pacific of Mexico and its employees came to an end on December 22, when 40 cases, of which 4 were key issues, were decided by Aquiles Cruz, president of the federal board of arbitration, acting in a personal capacity as arbiter. The dispute arose capacity as arbiter. when the railroad endeavored to cut wages 10 per cent. Among other issues involved was the employment of Mexican and American labor. The railroad was denied the right to make a 10 per cent reduction in wages, but was absolved from paying overtime claims of employees since 1926. The company also is allowed 60 days to comply with the new labor code, which requires that 90 per cent of the employees be natives of Mexico.

#### Propose 10 Per Cent Wage Cut for Clerks in Canada

A protest of some 7,000 men who comprise the International Brotherhood of Railroad Clerks in Canada against a 10 per cent cut in pay will shortly go before a board of conciliation for argument, it was announced in Montreal last week by union officers. Prof. John T. Culliton, of McGill University, will act as the unions' representative on the board and Erroll MacDougall, K.C., of Montreal, will appear for the railroads. The chairman has not been selected yet by the two

In agreeing to the creation of a board of conciliation, the brotherhood is following in the footsteps of allied railway workers in train and engine service, whose negotiations with the railroads on the wage reduction question are now temporarily at a standstill.

#### Air-Conditioned Cars on the Santa Fe

The Atchison, Topeka & Santa Fe is equipping 10 dining cars with the air circulating and cooling system which employs steam from the engine as the refrigerating energy and water as the sole refrigerating medium, thereby eliminating gaseous refrigeration. These cars are soon to be put in service on trans-

continental trains.

This system is furnished by the Safety Car Heating & Lighting Company. was developed by the Carrier Engineering Corporation and is made available through the co-ordinated efforts of the Safety Car Heating & Lighting Company and the Vapor Car Heating Company, Inc. These will be the first cars to be equipped with this type of air cooling system for operation on a railroad and will maintain a temperature not to exceed 80 deg. with a relative humidity of 50 per cent, when the outside temperature is 100 deg.

#### Wage Controversy on C. & N. W. Settled

Settlement of the wage controversy between the Chicago & North Western and the Brotherhood of Maintenance of Way Employees, which resulted in a strike ballot being taken, was effected on December 24. The agreement precludes a strike of maintenance of way workers, the majority of whom voted for a walkout. It also removes the last obstacle to peaceful settlement next month of the request of principal railroads for a general wage reduction of 10 per cent for all classes of organized employees. The 5,000 North Western maintenance of way employees whose wages were cut approximately 10 per cent on October 6 will be restored to the old scale. Settlement was accom-plished at a conference between Fred W. Sargent, president of the Chicago & North Western, and a committee of railroad union men, including Frederick H. Fljozdal, president of the Brotherhood of Maintenance of Way Employees.

#### Club Meetings

The Car Foremen's Association of Chicago will hold its next meeting at the Auditorium Hotel on Monday evening, January 11. The association will discuss the new A. R. A. Rules of Interchange.

The Canadian Railway Club will hold its next meeting at the Windsor Hotel, Montreal, on Monday evening, January 11. St. C. Holland will speak on "My Impressions of South America" following a recent visit to that country.

The New England Railroad Club will

hold its next meeting at the Copley-Plaza Hotel, Boston, on Tuesday evening, Clarence Birdseye, January 12. Gloucester, Mass., will give an address on quick freezing and its bearing on transportation of frosted foods.

The Pacific Railway Club will hold its

next meeting at Hotel Oakland, Oakland, Cal., on Thursday evening, January 14. Professor Stuart Daggett of the University of California, will speak on the fifteen per cent rate increase application and its probable results.

The Western Railway Club will hold its next meeting on Monday evening, January 18, at the Hotel Sherman, Chicago, at which time Samuel O. Dunn, editor of the Railway Age, will address the club on "The Future of the Railways."

The Eastern Car Foremen's Association will hold its next meeting at 29 West 39th Street, New York City, on Friday evening, January 22. Neil Hayes will speak on the A. R. A. Interchange Rules.

#### New York Central Reduces Pensions

Owing to present economic conditions, the New York Central will reduce its existing and future monthly pensions, effective with payments covering the month of January, by from 10 to 15 per cent. According to the official statement of Frank V. Whiting, chairman of the road's board of pensions, monthly payments of more than \$25, to and including those of \$65, will be reduced by 10 per cent, but no such pension will be cut below \$25; while payments in excess of \$65 will be reduced by 15 per cent, but in no case below \$58.50. There is to be no reduction in pensions of \$25 or less.

In the past 22 years, the New York Central Lines have disbursed \$29,100,000 in pensions to retired employees, Mr. Whiting announced on January 3. Since the pension plan was adopted January 1, 1910, 12,018 pensions have been granted, and a total of 6,790 pensions have terminated, leaving at the close of 1931, 5,228 pensions in effect. Payments on pension allowances during the year 1931, to 5,786 pensioners, will approximate \$3,500,000. During last year approximately 815 pensions were granted and 558 terminated on account of death. In 1931 the average length of service of all retired employees was 34.63 years.

#### Canadian Wage Reduction

Officers of the Canadian National and Canadian Pacific last week offered to repay the ten per cent cut made in the checks issued to train and engine men if the general chairmen would agree to the ten per cent cut going into effect as from December 1. This was met by a firm refusal from the chairmen.

The proposal of the railways to cut wages of these employees by ten per cent has met with steadfast opposition from the union chairmen. A board of conciliation, as provided for in the Industrial Disputes Investigation Act, was set up and, by a majority of two to one, supported the railways' proposals. Checks issued to the men representing pay earned from November 15-30 had this deduction made. The chairmen at once protested against the retroactive feature of the reduction and wrote to the Labor Department at Ottawa for an opinion. This, they claim, sustained them. The railway executives differ from them in their reading of it.

The railway officers and the chairmen will not meet again until some time after 14.

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the middle of January, but most of the chairmen will convene their respective committees before then to learn their attitude in view of what has transpired since they were in communication with their chairmen last.

#### Roosevelt Urges Higher Commercial Vehicle Tax

Governor Franklin D. Roosevelt of New York in his message to the Legislature on January 6 urged higher taxation for heavy buses and trucks and promised to make specific recommendations in this connection in his budget message. He will also propose a higher gasoline tax. His remarks on bus and truck taxation follow:

"For many generations the greatest of common carriers, the railroads, have formed the backbone of that form of wealth which seeks stable investment. Banks, insurance companies, charities, hospitals, churches, trust funds, all, rightly or wrongly, have placed confidence in the permanence of the underlying mortgages of the railroads. Many people of late have seen the serious effects of a nationwide depression on railroad traffic. The railroads are heavy sufferers, in addition, from a new competition by great trucks and buses on highways built by the State. In view of the fact that the taxes paid by the railroads have helped and are helping to build these highways and that the trucks and buses now use them almost tax-free, a better equalization of taxes is called for in all fairness. I shall ask in my budget message for a tax on heavy motor vehicles commensurate with their use of the costly highways of the State."

#### Retroactive Reparation Order Nullified

An order of the Interstate Commerce Commission awarding reparation to a shipper on shipments of sugar moved on a rate which it had approved as reasonable but as to which it later modified its finding in another proceeding was ordered set aside in a decision of the Supreme Court of the United States on January 4 in the case of the Arizona Grocery Company v. Atchison, Topeka & Santa Fe Railway, et al. "The Com-mission's error arose," the court said, "from a failure to recognize that when it prescribed a maximum reasonable rate for the future it was performing a legislative function, and that when it was sitting to award reparation it was sitting for a purpose judicial in its na-In the second capacity, while not bound by the rule of res judicata, it was bound to recognize the validity of the rule of conduct prescribed by it and not to repeal its own enactment with retroactive effect. It could repeal the order as it affected future action, and substitute a new rule of conduct as often asoccasion might require, but this was obviously the limit of its power, as of that of the Legislature itself.

"Where the Commission has upon complaint, and after hearing, declared what is the maximum reasonable rate to be charged by a carrier, it may not at a later time, and upon the same or additional evidence as to the fact situation existing when its previous order was promulgated, by declaring its own finding as to reasonableness erroneous, subject a carrier which conformed thereto to the payment of reparation measured by what the Commission now holds it should have decided in the earlier proceeding to be a reasonable rate."

# Shippers Anticipate Reduced Carloading

Shippers of the country, through estimates submitted to the Shippers' Regional Advisory Boards, anticipate that carload shipments of the 29 principal commodities in the first quarter of 1932, will be approximately 5,241,746 cars, a reduction of 370,415 cars or 6.6 per cent below the corresponding period in 1931.

The estimate by boards as to loadings by cars in the first quarter, compared with the corresponding period in 1931 and the percentage of increase or decrease follows:

	Actual 1931		Per Cent of Increase or Decrease
Atlantic States	637,494	611,289	4.1 Dec.
Central Western	271,171	231,536	14.6 Dec.
Pacific Coast	204,016	192,906	5.4 Dec.
Pacific Northwest	160,902	153,369	4.7 Dec.
Great Lakes	304,808	289,114	5.1 Dec.
Ohio Valley	625,789	612,365	2.1 Dec.
Mid-West1		911,558	8.9 Dec.
Northwest	191,868	157,121	18.1 Dec.
Trans-MoKansas	336,012	326,300	2.9 Dec.
Southeast	631,326	596,356	5.5 Dec.
New England	141,498	125,770	11.1 Dec.
Allegheny	717,353	643,238	10.3 Dec.
Southwest	389,308	390,824	
Total	612.161	5.241.746	6.6 Dec.

It is estimated that of the 29 commodities, increases in transportation requirements will develop for five as follows: Cottonseed and products, except oil; fresh fruits other than citrus; petroleum and petroleum products; automobiles, trucks and parts, and chemicals and explosives.

# Commissioner Eastman Urges Abatement of Competition

Less competition within the railroad industry itself and more co-operation on the part of railroad managements was urged by Commissioner Joseph B. Eastman of the Interstate Commerce Commission in an address before the American Economic Association at Washington on December 30. Referring to the argument that the railroad industry has changed from a monopolistic to a competitive industry and that it may be well, therefore, to relieve the railroads in large measure from the burden of public regulation, he said that a recent examination into the matter led him to say without hesitation that public regulation has always been directed quite as much against evils resulting from competition as against those resulting from monopoly. He expressed the belief that a modest beginning should be made in the regulation of interstate motor transportation and that it seems not unlikely that water carriers will themselves ask for public regulation of their rates as a protection against rate wars and de-structive competition. He also said that some changes in the laws to permit freer use by railroads of motor trucks and buses as auxiliaries, and also to bring such operations within the scope of public regulation, may be desirable, and that "the prime problem for railroad managers

is to determine to what extent these apparent enemies, and particularly the motor truck, can be used as auxiliaries and allies to supplement and improve strictly railroad service." If they will refresh their recollection of the conditions which prevailed before federal rate regulation, he said, he doubted whether the railroads or even their security holders would wish it eliminated or even greatly curtailed.

#### Injunction Sought to Prevent Construction of Dotsero Cutoff

A suit to prevent the Denver & Rio Grande Western from purchasing the Moffat railroad and building the Dotsero cutoff has been brought in Wilmington, Del., where oral arguments will be heard on January 20. The suit is brought by the Moffat Tunnel League, of Steamboat Springs, Col. and the Uintah Basin Railroad League, a group of Utah men, and seeks an injunction to restrain the Denver & Rio Grande Western, a Delaware Corporation, from carrying out the order of the Interstate Commerce Commission, which authorized the Rio Grande to start construction of the Dotsero cutoff, linking the Rio Grande and the Moffat roads west of the Moffat tunnel.

The petition asks that the commission's order of Feb. 1, 1930, authorizing the acquisition through stock purchase, be declared illegal on the ground that no hearing was held to ascertain if the proposal was in the public interest.

Before the commission's final order was entered on September 15, the Rio Grande agreed to begin work on the Dotsero cutoff in six months and to complete it in two years, and to pay \$155 a share for all Moffat road stock offered in the succeeding six months. Thus far, according to the petition, the Rio Grande has not carried out any of these pledges. Work has not been started on the cutoff, Moffat road stock offered the Rio Grande has not been purchased, and because of the depressed condition of railroad securities, the Rio Grande has been unable to finance either the cutoff or the stock purchase. Both the Rio Grande and the Interstate Commerce Commission are defendants of the injunction suit.

# Suspension of Low Barge Rate on Cotton Continued

Besieged with conflicting evidence and faced by a law which in the same paragraph declares it to be the policy of Congress to encourage and develop water transportation and to "foster and preserve in full vigor both rail and water transportation," the Secretary of War, Patrick J. Hurley, announced on December 31 that he had directed a continuation of the suspension of the reduced rates on cotton from Memphis to New Orleans proposed by the Inland Waterways Corporation, which was ordered on October 16, until he can assemble all the facts involved and reach a final decision. rates involved, put into effect by the federal barge line on October 6, were 20 cents per 100 lb., or \$1 a bale on cotton compressed in high-density bales and 25 cents, or \$1.25 a bale on standard-density bales, applicable only on shipments of 2,000 bales on one bill of lading. After

protests against this drastic reduction had been made to President Hoover by some of the railway executives the rates were ordered suspended pending an investigation and it was announced that it was hoped a decision could be reached early in the cotton-shipping season. Secretary Hurley has received several reports on the subject, pointing out on the one hand that the barge line could make a profit over out-of-pocket expenses at such a low rate applied to full barge loads, but that it would seriously reduce the revenues of certain railways that ordinarily carry most of this cotton, in addition to injuring cotton-handling communities away from the Mississippi river and probably breaking down a carefully worked out rate adjustment prescribed by the Interstate Commerce Commission.

In announcing the continued postpone-ment Secretary Hurley said he had had difficulty in obtaining conclusive facts on which to base a final decision as to whether the rate reduction should be allowed to go into effect and that he did not intend to take a position that would tend to destroy rail facilities in order to augment the traffic of the inland water-

wavs system. Major General Ashburn, of the Inland Waterways Corporation, has announced that 58,387 bales of cotton were transported by the barge line under the reduced rates between October 6 and December 14, including some handled before the rates were suspended and some under commitments which had been made and were expected from the suspension. In the same period the barge line moved 109,238 bales under the old joint rail-water rates. It is understood that a considerable quantity of cotton which had been trucked to the river in anticipation of the proposed reduced rate was also carried in independent barges at rates slightly above those proposed by the federal barge line.

### Conferences on Wages at Chicago on Jan. 14

(Continued from page 93)

ment retroactive to January 1. Likewise, if other organizations enter into agreements to become affective on a date subsequent to January 1, the effective date of the shopmen's lower pay shall be changed accordingly, with restoration of deducted amounts. During the negotiations leading to this agreement, the shopmen asked that no further wage reductions be made and that a minimum working week of four days be guaranteed. Following the agreement with its shopmen, the Southern Pacific notified the Brotherhood of Maintenance of Way Employees that the pay of its members will be cut 15 per cent, effective in 30 days.

Employees of the Southern Pacific lines in Texas and Louisiana, including train dispatchers, yardmasters, supervisory foremen in the mechanical department, clerical employees in the general offices, shop crafts, dining car employees and certain passenger train employees, agreed to a 10 per cent reduction in wages on January 2.

On January 4 shopmen on the Illinois Central agreed to a 10 per cent wage reduction, effective January 1.

Shopmen of the Denver & Rio Grande Western on December 30 accepted, voluntarily, a reduction of 10 per cent in wages to assist the road in keeping the shops in operation and in providing employment for the largest possible number of men. The reduction is a temporary arrangement and as soon as conditions improve, former wage scales will be re-

A 10 per cent reduction in the salaries of all officers and subordinate officers occupying supervisory positions on the Atlantic Coast Line, and the Louisville & Nashville, was made effective on January 1. The reduction does not apply to any class of subordinate officers occupying supervisory positions who are represented by organizations having wage agreements with the railroad. On the same day the salaries of all general, subordinate and supervisory officers of the Nashville, Chattanooga & St. Louis were also reduced 10 per cent.

On January 1, train and yard service employees of the Chicago, Burlington & Quincy accepted a mileage curtailment plan to insure employment of many men who have been laid off. Under the plan, when the regular workers have reached the maximum miles or hours, they will give way to men from the extra list. Passenger trainmen have been restricted to 5,500 miles maximum a month, extra passenger trainmen to 4,500 miles, regular freight trainmen to 3,500 miles, and regular yardmen and switchtenders to 208 hours. The mileage curtailment plan is in keeping with a resolution passed by the Brotherhood of Railway Trainmen at its annual meeting last spring, urging the division of work to keep down unemployment among its members.

### Meetings & Conventions

The following list gives names of secretaries, date of next or regular meetings and places of

meetings.

AIR BRAKE ASSOCIATION.—T. L. Button, Room 5605, Grand Central Terminal Building, New York City.

ALLIED RAILWAY SUPPLY ASSOCIATION.—F. W. Venton, Crane Company, 836 S. Michigan Blvd., Chicago. To meet with Air Brake Association, International Railway Fuel Association, International Railway Fuel Association, International Railway Fuel Association, International Railway General Foremen's Association, Master Boiler Makers Association and the Traveling Engineers' Association

AMERICAN ASSOCIATION OF FREIGHT TRAFFIC OFFICERS.—W. R. Curtis, F. T. R., M. & O. R. R., Chicago, Ill.

AMERICAN ASSOCIATION OF GENERAL BAGGAGE AGENTS.—E. L. DUNCAN, 332 S. Michigan Ave., Chicago.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—W. C. Hope, C. R. R. of N. J.,

Ave., Chicago.

American Association of Passenger Traffic
Officers.—W. C. Hope, C. R. R. of N. J.,
143 Liberty St., New York.

American Association of Railroad Superintendents.—F. O. Whiteman, Room 800,
1017 Olive St., St. Louis, Mo. Next meeting, June 14-16, 1932, Detroit, Mich.

American Association of Superintendents of
Dining Cars.—F. R. Borger, C. I. & L. R.
R., 836 Federal St., Chicago.

American Electric Railway Association.—
Guy C. Hecker, 292 Madison Ave., New
York.

Guy C. Hecker, 292 Madison Ave., New York.

AMERICAN RAILWAY ASSOCIATION.—H. J. Forster, 30 Vesey St., New York, N. Y. Division I.—Operating.—J. C. Caviston, 30 Vesey St., New York, N. Y. Freight Station Section.— R. O. Wells,

Freight Agent, Illinois Central Railroau,

Freight Agent, Illinois Central Railroad, Chicago.
Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York.
Protective Section.—J. C. Caviston, 30 Vesey St., New York.
Safety Section.—J. C. Caviston, 30 Vesey St., New York.
Safety Section.—J. C. Caviston, 30 Vesey St., New York.
Telegraph and Telephone Section.—W. A. Fairbanks, 30 Vesey St., New York.
Division II.—Transportation.—G. W. Covert, 59 East Van Buren St., Chicago.
Division III.—Transportation.—G. W. Covert, 59 East Van Buren St., Chicago.
Division IV.—Engineering.—E. H. Fritch, 59 East Van Buren St., Chicago. Next meeting, March 15-16, 1932, Palmer House, Chicago. No exhibit by National Railway Appliances Association at 1932 meeting.
Construction and Maintenance Section.—E. H. Fritch, 59 East Van Buren St., Chicago.
Next meeting, March 15-16, 1932, Palmer House, Chicago.
Electrical Section.—E. H. Fritch, 59 East Van Buren St., Chicago.
Signal Section.—R. H. C. Balliet, 30 Vesey St., New York. Annual meeting May 10-11, 1932, Stevens Hotel, Chicago.
Division V.—Mechanical.—V. R. Hawthorne, 59 East Van Buren St., Chicago.
Equipment Painting Section.—V. R. Hawthorne, 59 East Van Buren St., Chicago.
Division VI.—Furchases and Stores. W. J. Farrell, 30 Vesey St., New York, N. Y. Division VII.—Freight Claims.—Lewis Pilcher, 59 East Van Buren St., Chicago.
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tion, October 18-20, 1932, Toronto, Ont. Exhibit by Bridge and Building Supply Men's Association.

American Railway Development Association.

—A. W. Large, Gen. Agri. Agt., C. R. I. & P. Ry., Chicago, Ill. Annual meeting, June 15-17, 1932, Brown Hotel, Louisville, Ky.

American Railway Engineering Association.—

Works in co-operation with the American Railway Association, Division IV.—E. H. Fritch, 59 East Van Buren St., Chicago, Next meeting, March 15-16, 1932, Palmer House, Chicago. No exhibit by National Railway Appliances Association at 1932 meeting.

American Railway Magazine Editors Association.—Miss E. Kramer, M.-K-T Employees Magazine, St. Louis, Mo. Next convention, April, 1932, San Antonio, Tex.

American Railway Tool Foremen's Association.—G. G. Macina, C., M., St. P. & P. R. R., 11402 Calumet Ave., Chicago. Exhibit by Supply Association of the American Railway Tool Foremen's Association.—E. E. Caswell, Union Twist Drill Co., 11 S. Clinton St., Chicago.

American Short Line Railroad Association.—R. E. Schindler, Union Trust Bidg., Washington, D. C.

American Scociety of Mechanical Engineers.—Calvin W. Rice, 29 W. 39th St., New York. Railroad Division, Paul D. Mallay, Johns-Manville Corp., 292 Madison Ave., New York.

American Wood Preservers' Association.—H. L. Dawson, 1104 Chandler Ruilding

Railroad Division, Paul D. Mallay, Johns-Manville Corp., 292 Madison Ave., New York.

American Wood Preservers' Association.—
H. L. Dawson, 1104 Chandler Building, Washington, D. C. Next meeting, January 26-28, 1932, Hotel Jefferson, St. Louis, Mo. Association of Railway Claim Agent, Northern Pacific Ry., St. Paul, Minn., Annual convention, May 18-20, 1932, Louisville, Ky.

Association of Railway Electrical Engineers.—Jos. A. Andreucetti, C. & N. W., Room 411, C. & N. W. Station, Chicago. Exhibit by Railway Electrical Supply Manufacturers' Association.

Association of Railway Executives.—Stanley J. Strong, Transportation Building, Washington, D. C.

Bridge and Building Supply Men's Association.—S. A. Baber, High Grade Manufacturing Co., 10418 St. Clair Ave., Cleveland, Ohio. Meets with American Railway Bridge and Building Association.

Canadian Railway Club.—C. R. Crook. 2276 Wilson Ave., N. D. G., Montreal, Que. Regular Meetings, 2nd Monday in each month, except June, July, and August, Windsor Hotel, Montreal, Que.

Car Department Officers Association.—A. S. Sternberg, M. C. B. Belt Ry. of Chicago, 7926 South Morgan Street, Chicago.

Car Foremen's Association of Chicago.—G. K. Oliver, 2514 W. 55th St., Chicago, Regular meetings, 2nd Monday in month, except June, July, and August, Auditorium Hotel, Chicago.

Car Foremen's Association of Los Angeles.—J. W. Krause, Room 299, 610 So. Main St., Los Angeles, Cal. Regular meetings, 2nd Monday of each month, except July, August and September, Room 299, 610 So. Main St., Los Angeles.

Car Foremen's Association of St. Louis, Mo.

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—F. G. Wiegman, 720 N. 23rd St., East St. Louis, Ill. Meetings first Tuesday of each month, except July and August, American Hotel Annex, 6th and Market Sts., St. Louis, Mo.

Central Railway Club of Buffalo.—T. J. O'Donnell, 1817 Hotel Statler, McKinley Square, Buffalo, N. Y. Regular meetings, 2nd Thursday each month, except June, July, August, Hotel Statler, Buffalo, N. Y.

Cincinnati Railway Club.—D. R. Boyd, 453
E. 6th St., Cincinnati, Ohio. Meetings 2nd Tuesday in February, May, September and November, Hotel Gibson, Cincinnati, O.

Cleveland Railway Club.—F. L. Frericks, 14416 Alder Ave., Cleveland, Ohio. Meetings second Monday each month, except June, July, August, Auditorium, Brotherhood of Railroad Trainmen's Building, West 9th St., and Superior Ave., Cleveland.

International Railway Congress.—Cairo, Egypt, January 10-16, 1933.

International Railway Fuel Association.—C. T. Winkless, Room 700 La Salle Street Station, Chicago.

International Railway General Foremen's Association.—Wm. Hall, 1061 W. Wabasha St., Windona, Minn.

Master Boiler Makers Association.—A. F. Stiglmeier, 29 Parkwood St., Albany, N. Y.

Master Car Builders' And Supervisors' Association.—(See Car Department Officers' Association.)

National Association of Railroad and Utilities Commissioners.—James B. Walker, 270 Maddison Ave., New York. Annual convention, November 15-18, 1932, Hot Springs, Ark.

National Association of Railroad Tie Producers.—Roy M. Edmonds, 1252 Syndicate Trust Bidg., St. Louis, Mo.

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National Association of Railroad Tie Producers.—Roy M. Edmonds, 1252 Syndicate Trust Bidg., St. Louis, Mo.

National Railway Appliances Association.—C. W. Kelly, 1014 South Michigan Ave., Chicago. Annual meeting, March 14, 1932, 1014 South Michigan Ave., Chicago. No exhibit at A. R. E. A. convention in 1932.

National Safety Council.—Steam Railroad Section; J. L. Walsh, (Honorary vice-chairman), Supt. Safety, M.-K.-T. R. R., Dallas, Tex.

SAFETY COUNCIL—Steam Railroad Section: J. L. Walsh, (Honorary vice-chairman), Supt. Safety, M.-K.-T. R. R., Dallas, Tex.

New England Railroad Club.—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, 2nd Tuesday in month, except June, July, August and September, Copley Plaza Hotel, Boston, Mass.

New York Railroad Club.—D. I. McKay, 26 Cortlandt St., New York. Regular meetings 3rd Friday in month, except June, July and August, 29 W. 39th St., New York City.

Pacific Railway Club.—W. S. Wollner, P. O. Box 3275, San Francisco, Cal. Regular meetings 2nd Thursday in month, alternately in San Francisco and Oakland.

Railway Accounting Officers' Association.—E. R. Woodson, 1124 Woodward Building, Washington, D. C. Next convention, 1932, Buffalo. N. Y.

Railway Business Association.—Frank W. Noxon, 1112 Shoreham Building, Washington, D. C.

Railway Club of Pittsburgh.—J. D. Conway, 1841 Oliver Building, Pittsburgh, Pa. Regular meetings, 4th Thursday in each month except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

Railway Electrical Engineers.

Railway Electrical Engineers.

Railway Electrical Engineers.

Railway Fire Protection Association.—R. R. Hackett, Baltimore & Ohio R. R. Baltimore, Md.

Railway Supply Manufacturers' Association.

J. D. Conway, 1841 Oliver Bildg.. Pitts.

RAILWAY FIRE PROTECTION ASSOCIATION.—R. R. Hackett, Baltimore & Ohio R. R. Baltimore, Md.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.
J. D. CONWAY, 1841 Oliver Bidg., Pittsburgh, Pa. Meets with Mechanical Division. Purchases and Stores Division and Motor Transport Division, American Railway Association.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelsong. 30 Church St., New York. Meets with Telegraph and Telephone Section of A. R. A. Division 1.

RAILWAY TERASURY OFFICERS' ASSOCIATION.—
L. W. COX, 1217 Commercial Trust Bidg., Philadelphia, Pa.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION. — T. F. Donahoe, Gen. Supvr. Road, Baltimore & Ohio, Pittsburgh, Pa. Next convention, September 20-22, 1932. Hotel Stevens, Chicago. Exhibit by Track Supply Association.

St. Louis Railway Club.—B. W. Frauenthal, Drawer 24, M. P. O., St. Louis, Mo. Regular meetings, 2nd Friday in month, except June, July and August. Statler Hotel, St. Louis. IGNAL APPLIANCE ASSOCIATION.—F. W. Edmunds, West Nyack (Rockland Co.), N. Y. Meets with A. R. A. Signal Section.

Southern And Southwestern Railway Club.—
A. T. Miller, 4 Hunter St., S.E., Atlanta, Ga. Regular meetings, 3rd Thursday in January, March, May, July, September and November. Ansley Hotel, Atlanta.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFI-CERS.—R. G. Parks, A. B. & C. Ry., Atlanta, Ga. SUPPLY MEN'S ASSOCIATION.—E. H. Hancock

CERS.—R. G. Parks, A. B. & C. Ry., Atlanta, Ga.

SUPPLY MEN'S ASSOCIATION.—E. H. Hancock Treasurer, Louisville Varnish Co., Louisville, Ky. Meets with A. R. A. Div. V. Equipment Painting Section.

TORONTO RAILWAY CLUB.—J. A. Murphy, 1405 Canadian National Express Building, Toronto 2. Regular meetings 1st Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—L. C. Ryan, Oxweld Railroad Service Co., Carbon & Carbide Building, Chicago. Meets with Roadmasters and Maintenance of Way Association.

TRAVELING ENGINEERS' ASSOCIATION. — W. O. Thompson, 1177 East 98th St., Cleveland, O. WESTERN RAILWAY CLUB.—J. H. Nash, Dristeam Valve Sales Corp., 122 S. Michigan Ave., Chicago. Regular meetings 3rd Monday each month, except June, July, August and September, Hotel Sherman, Chicago.

## **Equipment** and **Supplies**

#### FREIGHT CARS

THE NORTHERN PACIFIC is expected to act, within a few days, upon the inquiry for 150 hopper cars issued in November. During December the company started the construction of 500 box cars in its shops at Laurel, Mont., these shops being the last of four to begin the construction of cars under the \$4,500,000 freight car construction program which was started in 1931. The work started at other shops last year, including the construction of 500 stock cars at the Como shops in St. Paul, the rebuilding of 1,000 refrigerator cars at South Tacoma, Wash., and the construction of 1,000 box cars at Brainerd, Minn., is now nearing completion.

#### IRON & STEEL

THE CHICAGO & NORTH WESTERN is inquiring for 450 tons of structural steel for bridge work at Milwaukee, Wis.

THE ERIE is asking for prices of rails without mentioning the tonnage wanted. In 1931, this railroad ordered 42,000 tons and it is estimated the tonnage required this year will approximate 35,000.

#### MOTOR COACHES

THE SAMOSET COMPANY, highway subsidiary of the Maine Central, has pur-chased two 29-passenger Yellow motor coaches from the General Motors Truck Company.

#### SIGNALING

THE LEHIGH VALLEY has ordered from the General Railway Signal Company cab signal equipments for three gas-electric cars; miniature position-light signals, giving four indications, as well as audible warnings. The coded system will be used.

THE NEW YORK CENTRAL has ordered from the General Railway Signal Company an electric interlocking machine, 80 levers, for Tower CD at Croton, N. Y. This is to replace a Model 12 GRS machine which has been in service since January, 1913. The New York Central also has ordered a machine of 112 levers for Tower CR at Croton River, N. Y., replacing a machine of the same age as that at Tower CD.

## **Supply Trade**

W. J. Dukes, formerly representative of the Climax Engineering Company, has been appointed manager of engine sales in railroad and utility fields for the Caterpillar Tractor Company, Peoria, Ill.

William Grove, formerly with the Ingersoll Milling Machine Company, Rockford, Ill., is now associated with the sales engineering department of William Sellers & Company, Inc., Philadelphia, Pa. Mr. Grove will specialize on planer type milling machines and floor borers.

F. L. McManus has been elected vicepresident in charge of traffic of the General Refractories Company, Phila-delphia, Pa., D. M. Thorpe has been elected vice-president in charge of sales and L. Tschirky has been elected vicepresident and assistant to president.

Allen Bradley Company, Milwaukee, Wis., manufacturers of controllers for a.c. and d.c. motors, has appointed the Petroleum Electric Company as its agents in Oklahoma territory. The Petroleum Electric Company's main offices are located at 522 Commercial building, Tulsa, Okla., and a branch office is maintained at 531 West Main street, Oklahoma City.

The Hobart Brothers Company, Troy, Ohio, has appointed the Walter A. Deems Company, 143 Liberty street, New York, and the Thomas D. Crowley Company, 8 South Michigan avenue, Chicago, as exclusive distributors of Hobart constant arc welders to the steam and electric railway field in the eastern and western states, respectively.

The Ames-Baldwin-Wyoming Shovel Company has moved its general offices from North Easton, Mass., to Parkersburg, W. Va. All the chief executive officers of the company now have their headquarters at Parkersburg. The company will operate plants at Alton, Ill.; Anderson, Ind.; North Easton, Mass.; Parkersburg, W. Va., and Pittsburgh.

C. B. Crockett and R. L. Smith have been appointed eastern general sales agents of The Automatic Transportation Company, Inc., Chicago, for its electric industrial trucks, tractors and cranes. Centralized sales and engineering headquarters will be maintained in New York, at 405 Lexington avenue, with district offices at Boston, Mass., Hartford, Conn., Buffalo, N. Y., Newark, N. J., Philadelphia, Pittsburgh, Pa., Washington, D. C., Baltimore, Md., and Charlotte, N. C.

Charles G. Melvin, who was with the Galena Signal Oil Company from 1908 until June, 1928, when he resigned to go with the Griffin Wheel Company, as New York representative, and who severed his connection with the latter when its New York office was discontinued on July 1 last, has become associated with the White Company, Cleveland, Ohio, as its railroad representative. Mr. Melvin will have temporary headquarters at 111 Broadway, New York.

Charles J. Hardy has been elected a member of the executive committee of the American Car & Foundry Company and of the American Car & Foundry Securities Corporation, New York; he succeeds the late C. R. Woodin. Mr. Hardy has been general counsel of the American Car & Foundry Company since its organization in 1899 and has been a director since April, 1916. The other members of the executive committee are William H. Woodin and John Sherman Hoyt.

The Roberts & Schaefer Company, Chicago, has secured the exclusive rights, for the United States, of the Zeiss-Dywidag concrete "shell domes" and "barrel shell" roofs for permanent monolithic reinforced concrete for large building construction. This is a new type of concrete building construction pertected by Dykerhoff & Widmann, A. G., an engineering and contracting firm in Germany. The design permits the construction of thin, reinforced concrete roofs of very large spans without intermediate supports. To enable the Roberts & Schaefer Company to begin the construction of such buildings immediately, and to insure the duplication of the excellent record made abroad, experienced engineers are being brought from Germany to co-operate with the engineering department of the Roberts & Schaefer Company.

R. L. Suhl has been appointed man-. ager of the nickel sales department of the International Nickel Company, Inc., New York, succeding F. S. Jordan, deceased. Ransom Cooper, Jr., Walter C. Kerrigan, and Charles McKnight have been appointed assistants to Mr. Suhl. Mr. Suhl joined the original International Nickel Company on May 1, 1903, as laboratory assistant at the Bayonne (N.J.) refinery. He was appointed superintendent of electrolytic refining in 1908 and, during the World War, as superintendent of the oxide division, had entire charge of the roasting and leaching of the ores. In 1920 he joined the headquarters staff of the company at New York as a development engineer, continuing as a member of the development and research department until 1928 when he became assistant sales manager in the nickel department. Previous to 1929 Mr. Cooper was vice-president and sales manager of the American Mond Nickel Company. Mr. Kerrigan became associated with the International Nickel Company two years ago, having previously been general manager of the United States Nickel Company, at New Brunswick, N. J. Mr. McKnight, since 1922, has been in charge of alloy-steel development for the International Nickel Company.

Henry H. Peck, formerly with the Standard Steel Works Company, Burnham, Pa., has joined Lukenweld, Inc., Coatesville, Pa., as manager of sales. Lukenweld, Inc. is a division of Lukens Steel Company, and is engaged in the manufacture of arc welded rolled steel parts for all types of machinery and equipment. Mr. Peck for many years

was associated with iron and steel foundries throughout the country, principally in the sale of castings. He suc-



Henry H. Peck

ceeds John S. Bleecker, formerly in charge of sales for Lukenweld, Inc. Mr. Bleecker has been appointed manager of sales research and advertising for Lukens Steel Company and its divisions, Lukenweld, Inc., and By-Products Steel Corporation.

John H. Trent has been appointed general manager of the transportation and government department, western and southwestern divisions of the Johns-Manville Sales Corporation, New York. Mr. Trent will have his headquarters at St. Louis, Mo. He was born in Meade county, Ky. and was educated in the public schools of Paducah, Ky. In 1901 he entered the service of the Illinois



John H. Trent

Central and after serving in the mechanical and stores departments at Burnside shops, Chicago, he became storekeeper at Water Valley, Miss., subsequently serving at Memphis, Tenn. and Paducah, Ky. Mr. Trent for the last 25 years has been connected with the Johns-Mansville Sales Corporation.

J. Frederic Wiese, assistant to the general manager of sales of the Lukens Steel Company, Coatesville, Pa., has been appointed assistant to F. H. Gordon, vice-president in charge of sales. Mr. Wiese, upon graduation from

Swarthmore College in 1921, joined The Parkesburg Iron Company, Parkesburg, Pa., as mill representative with headquarters in Chicago, covering the midwest, southwest and northwest. In this work, his principal contact was with the railroads. In 1926, Mr. Wiese joined Lukens Steel Company as assistant to general manager of sales, and two years later was placed in charge of the sale



J. Frederic Wiese

of Lukens products to the railroads. In his new capacity, Mr. Wiese will continue his supervision over railroad sales, and will be located, as before, at Coatesville.

#### **OBITUARY**

Harold Brooks Gardner, eastern manager, Westinghouse Air Brake Company, New York, died on January 2, of pneumonia, at his home, New Rochelle, N. Y. Mr. Gardner was born on March 5, 1895, at Altamont, N. Y. He was a graduate of the Altamont high school and of Union College, receiving



Harold Brooks Gardner

his degree of A. B. in 1916. On leaving college he joined the Locomotive Stoker Company, Pittsburgh, Pa., and left in 1917 to enlist in the Regiment of Engineers of the Thirty-Sixth Division of the A. E. F. He was in the service two years, during one of which he was overseas and was in action before Verdun.

After being honorably discharged from service, he returned to the Locomotive Stoker Company and continued with that organization until 1923, when he joined the New York office of the Westinghouse Air Brake Company. In 1926 he went to Chicago as vice-president of the Westinghouse Friction Draft Gear Company. One year later he returned to New York and was appointed eastern manager of the Westinghouse Air Brake Company, which position he held at the time of his death. Mr. Gardner was a member of a number of clubs including the Engineers' Club, and was also one of the executive members of the New York Railroad Club.

Frederick S. Jordan, sales manager of the nickel department of The International Nickel Co., Inc., New York, and for the past thirty years connected with the nickel industry, died at his home in New York on December 16 from cerebral hemorrhage. Mr. Jordan was born on August 28, 1869, at Berea, Ohio. He began his business career at the age of 18 as a secretary in the Cleveland office



Frederick S. Jordan

of the Cleveland, Cincinnati, Chicago & St. Louis. A year later he became private secretary to H. P. McIntosh of The Canadian Copper Company, and when that company was merged into the organization of the original International Nickel Company in 1902, Mr. Jordan went to New York as sales executive, a position which he held during the development of the company; at the time of his death Mr. Jordan was sales manager of its nickel department.

"FURNACE MALLEABLE" FITTINGS .-Specifications and drawings of Flagg "Furnace Malleable" 300 WSP fittings and unions, made from "refined" higher strength malleable iron especially adapted for railroad work, are shown in the 10page catalog issued by Stanley G. Flagg & Co., Inc., 1421 Chestnut street, Philadelphia, Pa. The fittings are designed for steam, water or air up to working pressures of 300 lb. per sq. in. At regular intervals samples are subjected to hydrostatic pressures from 2,000 to 3,000 lb. per sq. in. The threads on the ends pipe to be used with these fittings should be cut twice the pitch, or two threads, longer than is called for with standard fittings.

#### Construction

BALTIMORE & OHIO-READING.-In connection with an extensive improvement program planned by these two companies in Philadelphia, Pa., the Reading has been authorized by the city council to construct, at a cost of about \$1,100,000, a double-track viaduct connecting its lines at Ninth street and Fairmount avenue with the east entrance of its Pennsylvania avenue subway. This viaduct, together with a \$1,000,000 tunnel which the Baltimore & Ohio was recently authorized to build from Twenty-fourth and Callowhill streets, under the Parkway to a junction with the Reading tracks in the Pennsylvania avenue subway near Twenty-first street, will provide a route from the Baltimore & Ohio station to the main line of the Reading that will be considerably shorter than the present connection. The city of Philadelphia and the Baltimore & Ohio are also reported to have reached an agreement which will make possible an early start on that road's proposed \$10,-000,000 terminal on the site of its present station at Twenty-fourth and Chestnut The B. & O., these reports instreets. dicate, has agreed to pay \$2,000,000, or more than half the cost of land required for the improvement.

CANADIAN NATIONAL.—Bids will be received by W. U. Appleton, general manager, Atlantic region, C. N. R., at Moncton, N. B., up to noon, January 5, for the construction of the superstructure of this company's new passenger station at St. John, N. B.

CHESAPEAKE & OHIO.—The company is preparing plans for the construction, at an estimated cost of \$101,069, of an undergrade crossing at Olentangy boulevard, Columbus, Ohio.

Denver Pacific.—This company has applied to the Interstate Commerce Commission for authority to build a new railroad from Denver, Colo., to San Pedro harbor, Calif., 800 miles, without branches, via Grand Junction, Colo., Moab, Utah, and Barstow and San Bernardino, Calif., following the Colorado river for a large part of the distance. A map was filed with the application but other details were reserved for the return to the commission's usual questionnaire. The application was signed by Colman Crenshaw, of Salt Lake City, Utah, as president, and it was stated that the company had recently been incorporated in Delaware and that it has no connection with any other railroad. It is proposed to finance by selling stock and bonds.

Great Northern.—A contract has been awarded to W. T. Butler, Seattle, Wash., for the construction of an enginehouse at Bieber, Cal.

New YORK CENTRAL.—The Public Service Commission of New York has directed the elimination of a grade crossing of this company's tracks and the Amenia-Sharom highway about one mile northeast of Amenia, N. Y. The crossing will be re-

moved by raising the grade of the highway and carrying it over the railroad about 130 feet northeast of the existing crossing.

NEW YORK CENTRAL.—The Public Service Commission of New York has ordered the reconstruction of the bridge carrying the Loudon-Crescent state highway over this company's tracks in Colonie, N. Y.

Pennsylvania.—Construction of a railroad tunnel under the Potomac river to connect Washington, D. C., and Potomac Yard, Va., together with a complete rearrangement of freight terminal facilities in Washington, has been proposed to the Pennsylvania by the National Capital Park and Planning Commission, according to its annual report. The commission has taken the position that the present location of the railroad facilities and the line connecting with the present bridge across the Potomac are detrimental to the plans of the commission for the development of certain areas of the city. The total cost of the suggested improvements has been roughly estimated at

PENNSYLVANIA-READING.—The sylvania, on December 31, submitted to Harry Bacharach, mayor of Atlantic City and a member of the New Jersey Board of Public Utility Commissioners, plans for a new \$5,000,000 passenger terminal, to be erected at Atlantic City, N. J. proposal, which also includes the elimination of seven grade crossings, calls for track elevation from Higbee road, on the outskirts of the city, to a new highlevel station at Tennessee and Atlantic avenues, on the present site of the electric railway (West Jersey & Seashore) terminal. The Pennsylvania project is terminal. similar to, but independent of, plans submitted several weeks ago by the Reading, calling for a \$4,000,000 terminal at Arkansas and Arctic avenues, one block north of its present station, with gradecrossing elimination to be accomplished by relocation of tracks. As reported in the Railway Age of June 6, 1931, both the Pennsylvania and the Reading were ordered by the state utilities commission to prepare plans for grade separation work in Atlantic City, and to begin construction by November 1. In the meantime the commission itself has drawn up a plan for the consolidation, throughout southern New Jersey, of the lines of both roads, including, in this study, a proposal for a union station at Atlantic City. railroad plans, however, were submitted independently of that proposed by the commission, so that all three plans are now awaiting consideration

WESTERN PACIFIC.—The Interstate Commerce Commission has extended the time for the beginning and completion of the line from San Francisco to Niles, Cal., under its certificate to January 1, 1933, and January 1, 1935, respectively, on application of the company, to allow time for negotiations with the Southern Pacific for trackage rights which would eliminate part of the proposed construction.

#### **Financial**

ATCHISON, TOPEKA & SANTA FE.-Reduces Dividend .- The directors of this company have declared a quarterly dividend of \$1.50 on its common stock payable March 1 to stockholders of record on January 29, thereby reducing the annual basis from 10 per cent to 6 per cent.

CENTRAL OF GEORGIA.-Bonds.-The Interstate Commerce Commission has authorized this company to issue \$11,110,000 of refunding and general mortgage 5 per cent, series C, bonds, to be pledged and repledged as security for short term notes.

CENTRAL OF NEW JERSEY .- Bond .- This company has applied to the Interstate Commerce Commission for authority to extend for three years the maturity date of a five-year bond for \$1,250,000 maturing March 1.

CHICAGO & EASTERN ILLINOIS.—Notes. -The Interstate Commerce Commission has authorized this company to issue and renew from time to time \$7,326,764 of promissory notes and to pledge as collateral security therefor \$5,262,500 of series A and \$3,590,200 of series B prior lien mortgage bonds.

CHICAGO, BURLINGTON & QUINCY.-Trackage Rights .- The Interstate Commerce Commission has authorized this company to operate under trackage rights over the Chicago, Rock Island & Pacific between Mediapolis, Ia., and C. B. & Q. Junction, 13.9 miles, and from the latter point to Market Street, Burlington, Ia., 1.6 miles. The two companies are authorized to use certain tracks and terminals of each others' in Burlington.

CHICAGO, MILWAUKEE, ST. PAUL & PA-CIFIC.-Abandonment.-This company has applied to the Interstate Commerce Commission for authority to abandon its line from Hopkins, Minn., to Deephaven, 7.79

DELAWARE, LACKAWANNA & WESTERN. -Defers Dividend Action .- The directors of this company on December 31 failed to take action on the quarterly dividend, announcing that action would be deferred until June. The company paid 50 cents on its \$50-par stock in the preceding quarter and prior thereto the payment was \$1, or 8 per cent per annum.

DELAWARE, LACKAWANNA & WESTERN. -Notes.-This company has applied to the Interstate Commerce Commission for authority to pledge \$13,639,000 of New York, Lackawanna & Western first and refunding 5 per cent bonds and \$10 .-000,000 of Morris & Essex construction mortgage 41/2 per cent bonds as collateral for short term notes, which are to be used in part to retire an unsecured note for \$10,000,000 to the First National Bank of New York.

FONDA, JOHNSTOWN & GLOVERSVILLE .-Bonds .- The Interstate Commerce Commission has authorized this company to reduce the interest rate and extend the maturity date for 30 years on an issue of \$5,700,000 of first consolidated general mortgage 4½ per cent bonds now matur-ing in 1952. The interest is to be reduced to 2 per cent from 1931 to 1936 after which an additional 2 per cent will be payable if earned, cumulative.

LONG ISLAND.—Abandonment.—The Supreme Court of the United States on January 4 sustained the validity of an order of the Interstate Commerce Commission, which had been attacked by the New York Transit Commission, authorizing this company to abandon 4.7 miles of its Whitestone branch.

MISSOURI PACIFIC .- Bonds .- This company has applied to the Interstate Commerce Commission for authority to procure authentication and delivery of \$35,-000,000 of first and refunding mortgage 5 per cent bonds, Series I, to be pledged as collateral for short-term notes to meet cash requirements during 1932.

MOUND CITY & EASTERN.—Foreclosure Sale.—Judge Eliott of the United States District court at Pierre, S. D., has given permission to the Minneapolis Trust Company and A. B. Whitney to foreclose a mortgage of \$203,381 entered into by the MinnDak Construction Company, which constructed that portion of the Mound City & Eastern from Leola, S. D., to Long Lake. Work was stopped on the line in 1929 because of lack of funds, and under the order of the court the property is to be offered for sale for cash as one unit by the United States marshall of the district at a date to be fixed later. The sale is to take place at the court house in Leola when the date is finally

Mount Hoop.—Bonds.—The Interstate Commerce Commission has authorized this company to issue \$500,000 of 6 per cent refunding mortgage bonds to be exchanged for a like amount of matured

NEW YORK CENTRAL .- Bonds .- The Interstate Commerce Commission has authorized this company to issue \$100,000,-000 of refunding and improvement mortgage, series C, bonds to be pledged as collateral security for notes on the basis of \$125 in bonds, at the market price prevailing, to \$100, face amount, of notes.

YORK CENTRAL.-Notes .- This company has applied to the Interstate Commerce Commission for authority to ssue \$75,000,000 of 6 per cent promissory notes payable on demand or on specified dates not later than December 1, 1933, including \$58,500,000 of notes outstanding, to be secured by pledge of the \$100,-000,000 of refunding and improvement mortgage 5 per cent bonds recently authorized by the commission.

PENNSYLVANIA .- Bonds .- The Philadelphia, Baltimore & Washington has applied to the Interstate Commerce Commission for authority to issue and deliver to the Pennsylvania \$5,944,000 of general mort-

gage 5 per cent bonds in lieu of a like amount of 41/2 per cent bonds.

READING. - Reduces Dividend. - The directors of this company on December 29 declared a quarterly dividend of 50 cents a share on its \$50-par stock, thereby reducing the annual rate from 8 per cent to 4 per cent.

St. Louis-San Francisco.—Bonds.— The Interstate Commerce Commission has authorized this company to issue \$2,446,-000 of prior-lien mortgage 6 per cent, series E, bonds to be pledged with the trustee of its consolidated mortgage; to issue \$532,000 of refunding mortgage bonds under the refunding mortgage of the Kansas City, Fort Scott & Memphis, likewise to be pledged with the trustee; upon the above pledges, to issue \$4,014,000 of consolidated mortgage 6 per cent, series B, bonds to be pledged as collateral security for notes; and to issue from time to time an equal amount of consolidated mortgage 6 per cent, series C bonds in exchange for series B bonds which may be presented for conversion. Subsidiaries have been authorized to issue promissory notes to be delivered to the parent company in respect of capital expenditures as follows: St. Louis, San Francisco & Texas, \$55,252; Fort Worth & Rio Grande, \$57,183; Birmingham Belt, \$1,516.

St. Paul & Kansas City Short Line. -Bonds.-This company has applied to the Interstate Commerce Commission for authority to issue \$11,357,000 of first mortgage 4½ per cent bonds, to be delivered to the Chicago, Rock Island & Pacific, and to be pledged by the Rock Island as collateral for short term notes.

TEXAS & NEW ORLEANS, -Abandonment.—This company and the Galveston, Harrisburg & San Antonio have applied to the Interstate Commerce Commission for authority to abandon a branch line of 9.86 miles in Harris county, Tex.

WABASH .- Interest on Bonds Paid .-On application of the receivers for the Wabash, Federal Judge C. B. Davis, on January 1 authorized them to pay, out of funds in their possession, \$269,776 interest due on January 2 on various underlying bonds and notes of the company. The receivers stated in their application that the payment of the interest would protect the collateral of the railroad securing the bonds and notes, and give the receivers reasonable time to procure adequate funds to pay the notes and meet future installments on the bonds.

#### **Dividends Declared**

Atchison, Topeka & Santa Fe.—Common, \$1.50, quarterly, payable March 1 to holders of record January 29.

Delaware, Lackawanna & Western.—Dividend omitted.

Reading Company.—Common, 50c, quarterly, payable February 11 to holders of record January 14.

#### Average Prices of Stocks and of Bonds

	Jan. 5	Last week	Last
	28.43	30.15	88.01
Average price of 20 repre-	65 98	64.52	93.71

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### Railway Officers

#### **EXECUTIVE**

William T. Noonan, president of the Buffalo, Rochester & Pittsburgh when it was recently acquired by the Baltimore & Ohio, has been elected vice-president of the latter road and executive representative at Rochester, N. Y.

C. J. Stephenson has been appointed vice-president and general superintendent of the St. Louis-San Francisco's Texas lines, the Fort Worth & Rio Grande and the St. Louis, San Francisco & Texas, to succeed O. H. Mc-Carty, deceased.

Effective December 31, 1931, C. J. Smith, vice-president in charge of European and continental affairs of the Canadian National, with headquarters at London, England, retired from active service. P. A. Clews, European traffic manager, has been appointed acting manager in charge of the European organization.

# FINANCIAL, LEGAL AND ACCOUNTING

Following the inauguration of the district accounting system on the Northern Pacific, to replace the division accounting system which heretofore has been in use, three district accountants have been appointed. G. H. Lemke, assistant auditor of disbursements, with headquarters at St. Paul, Minn., has been appointed district accountant of the Eastern district with the same headquarters. G. H. Kern, traveling auditor of disbursements, at St. Paul, has been appointed district accountant of the Central district, with headquarters at Livingston, Mont. E. R. Wales, western auditor and paymaster, with head-quarters at Seattle, Wash., has been appointed district accountant of the Western district, with headquarters at Tacoma, Wash. George E. Lees, chief clerk to the auditor of disbursements at St. Paul, has been appointed assistant auditor of disbursements, at the same point, to succeed Mr. Lemke. Paul G. Ramswick, chief traveling auditor of disbursements, has been appointed assistant auditor of disbursements in charge of road work, with headquarters as before at St. Paul. The position of western auditor and paymaster at Seattle has been abolished.

#### **OPERATING**

W. N. Garvin, acting superintendent on the Wabash, with headquarters at St. Louis, Mo., has been appointed superintendent of the St. Louis Terminal division, with headquarters at St. Louis

J. H. Hustis, Jr., has been appointed manager of the Grand Central terminal

of the New York Central, succeeding Miles Bronson, who, because of ill health, has retired after 36 years of railroad service.

The jurisdiction of T. J. Clarken, manager of lighterage of the Lehigh Valley, has been extended to include the New York and Jersey City piers, his title being changed to manager of New York terminals.

W. E. Curley, yardmaster on the Illinois Central, at Chicago, has been appointed acting trainmaster at the Markham yards, Chicago, to succeed J. P. Kenney, who has been transferred to Congress street, Chicago, where he replaces R. W. Watts, whose promotion to general agent is noted elsewhere in these columns.

Effective January 1, H. E. Wolcott, superintendent of the Schuylkill division of the Pennsylvania, at Reading, Pa., was transferred to a similar position on the Williamsport division, succeeding H. H. Russell, newly appointed manager of water service. K. R. Vought, formerly superintendent of the Baltimore division, who has been on leave of absence, will return to active duty as superintendent of the Schuylkill division, succeeding Mr. Wolcott.

John McMillan, general manager of telegraphs of the Canadian Pacific, retired on January 1, after almost 49 years of service. W. D. Neil, assistant general manager of telegraphs, has been appointed general manager of the railway's new department of communications, having supervision over all the C. P. R. telegraph, telephone and radio broadcasting services. E. H. Goodfellow, superintendent of telegraph at Vancouver, B. C., has been appointed assistant general manager. Both will have headquarters at Montreal, Que. Charles W. MacDonald, inspector of telegraphs at Winnipeg, Man., has been appointed superintendent of communications at Vancouver, B. C.

W. F. Schaff, assistant general manager of the New York Central, west of Buffalo, and of the Ohio Central Lines, has been promoted to general manager of these lines, with headquarters as before at Cleveland, Ohio, succeeding D. R. MacBain, vice-president and general manager, who retired from active service on January 1, after serving the New York Central for 55 years. Mr. Mac-Bain will retain his connection with this road as assistant to the vice-president at Cleveland. Ernest Thwaites, superintendent with jurisdiction over the Toledo Terminal district, the Toledo division and the Ohio Central Lines, with headquarters at Toledo, Ohio, has been promoted to assistant general manager of the lines west of Buffalo, and of the Ohio Central Lines, with headquarters at Cleveland to succeed Mr. Schaff. E. W. Brown, assistant superintendent of the Toledo Terminal district and the Toledo division, with headquarters at Toledo, has been promoted to superintendent of the Toledo Ter-minal district, the Toledo division and the Ohio Central Lines, with the same headquarters, to succeed Mr. Thwaites. L. J. Petrot, trainmaster at Toledo, has been promoted to assistant superintendent of the Toledo Terminal and the Toledo division, with the same headquarters, to succeed Mr. Brown.

Effective January 1, the Buffalo divi-sion of the Lehigh Valley was extended to include the Auburn division and the west end of the Seneca division to and including Athens, Pa. The Wyoming including Athens, Pa. division was extended to include the east end of the Seneca division to Athens, Pa., and the Lehigh division extended to include the New York division. F. M. Barker has been appointed sion. F. M. Barker has been appointed superintendent of the Buffalo division, with headquarters at Buffalo, N. Y.; F. S. Mitten will remain as superintendent, at Wilkes-Barre, Pa., of the enlarged Wyoming division, and R. L. Gebhardt will continue as superintendent of the Lebich division with beadent of the Lehigh division with head-quarters at Easton, Pa., as before. W. W. Abbott, formerly superintendent of the New York division, has retired at his own request. P. T. Reilly, formerly superintendent of the Seneca division, has been appointed assistant superintendent of the Buffalo division with headquarters at Sayre, Pa., and Buffalo, N. Y., and F. Maguire, formerly superintendent of the Auburn division, has been appointed trainmaster of the Buffalo division, with headquarters at Auburn, N. Y. J. J. Swift will continue to serve as assistant superintendent of the Lehigh division, with headquarters at Jersey City, N. J. J. A. O'Boyle has been appointed trainmaster of the Buffalo and Wyoming divisions, with head-quarters at Sayre, Pa., and the position of trainmaster at Manchester has been abolished.

#### TRAFFIC

R. W. Watts, trainmaster on the Illinois Central, with headquarters at Chicago, has been promoted to general agent at the Union Stock Yards, Chicago, a newly-created position.

W. A. Stingley, traveling freight agent for the Chicago, Burlington & Quincy at Denver, Colo., has been promoted to general agent at Peoria, Ill., to succeed H. D. Page, deceased.

W. A. Olliff, general freight and passenger agent of the Georgia, Southwestern & Gulf, has resigned to accept service with another company. C. R. Sherwood has been appointed general agent, traffic, in charge of rates and divisions.

Robert P. Newman, city passenger and freight agent for the New York Central at Denver, Colo., has been promoted to general agent in the freight department at that point, to succeed James J. Ford, who retired on January 1, having reached the age of 70 years.

W. C. O'Heron, assistant chief clerk in the traffic department of the Atchison, Topeka & Santa Fe, at Chicago, has been promoted to assistant general freight agent, with headquarters at Galveston, Tex., where he succeeds D. R. Simpson, who has resigned.

- G. W. Stoltz, traveling freight agent for the Chicago, Milwaukee, St. Paul & Pacific at St. Louis, Mo., has been promoted to general agent at the same point, to succeed C. J. Peterson, who has retired after 44 years' service with the Milwaukee.
- C. M. Ashworth, division freight agent on the Alton, with headquarters at Bloomington, Ill., has been promoted to general agent, with headquarters at Peoria, Ill., succeeding F. W. Birchett, who has been promoted to general eastern agent at New York, where he replaces Frank Bowman, who has been assigned to other duties.
- C. E. Hall, general agent for the Delaware, Lackawanna & Western, at Seattle, Wash., has been promoted to assistant western traffic manager, with head-quarters at Chicago, a newly-created position. R. H. Savage, commercial agent for the Lackawanna at Portland, Ore., has been promoted to general agent at Seattle, to succeed Mr. Hall.
- C. L. Townsend, assistant general passenger agent of the Northern Pacific, with headquarters at Seattle, Wash., has been promoted to general passenger agent, with the same headquarters. F. J. Berry, assistant general freight agent, with headquarters at Seattle, has been appointed assistant general freight and passenger agent, with headquarters at Portland, Ore., following the retirement of A. D. Charlton, general passenger agent, and F. H. Fogarty, assistant general freight agent, both with headquarters at Portland. H. G. Smith, chief clerk in the Portland offices, has been promoted to general passenger agent at Portland. W. B. Elliott, city passenger agent at Butte, Mont., has been promoted to general agent in Montana, to succeed C. E. McMillen, deceased.
- J. W. Switzer, assistant passenger traffic manager of the New York Central, Lines West of Buffalo, and of the Michigan Central, the Cleveland, Cincinnati, Chicago & St Louis, the Ohio Central Lines and the Pittsburgh & Lake Erie, with headquarters at Chicago, has been promoted to passenger traffic manager of the lines east of Buffalo, with headquarters at New York, succeeding Albert E. Brainard, who has been granted an extended leave of absence. These changes will become effective on January 15. Biographical sketches and photographs of Mr. Brainard and Mr. Switzer were published in the Railway Age of June 20, 1931. on pages 1222 and 1223, respectively. Joseph R. O'Malia, general coal and ore agent at Cleveland, Ohio, was also appointed general coal traffic manager, with headquarters at New York, on January 1.

#### **MECHANICAL**

T. M. Hawkins, assistant master mechanic, purchasing agent and storekeeper of the Quebec Central, has been appointed master mechanic, with head-quarters as before at Sherbrooke, Que., succeeding G. M. Robins, who retired from active service on January 1.

C. F. Helme, master mechanic of the Lehigh division of the Lehigh Valley, at Easton, Pa., has been appointed superintendent of Sayre shops, with jurisdiction over Sayre engine terminal, assuming also the duties of master mechanic of the Wyoming division, with headquarters at Sayre, Pa. M. Jefferson has been appointed to succeed Mr. Helme as master mechanic of the Lehigh division. D. W. Davis has been appointed assistant master mechanic of the Lehigh division, with headquarters at Ashmore, Pa.

# ENGINEERING AND SIGNALING

- J. F. Donovan has been appointed division engineer of the Lehigh Valley, with headquarters at Wilkes-Barre, Pa., succeeding F. N. Loughnane, transferred.
- J. A. Russell, engineer of water service of the Pennsylvania, with headquarters at Philadelphia, Pa., was appointed manager of water service, effective January 1. Mr. Russell has been succeeded by H. H. Russell, superintendent of the Williamsport division, at Williamsport, Pa.
- Arthur L. Davis, principal assistant engineer of the Illinois Central, with headquarters at Chicago, has retired from active service because of ill health, effective January 1. Maro Johnson, assistant engineer, at Chicago, has assumed the duties formerly handled by Mr. Davis, with no change in title.

Effective January 1, the engineering forces of the Alton were reorganized to conform to the divisional type of organization, involving the creation of the positions of division engineer and assistant division engineer and the abolition of the position of general road-master. A. F. Kadow, assistant engineer, with headquarters at Chicago, has been appointed division engineer of the Eastern division, with headquarters at Bloomington, Ill., while M. Donahoe, general roadmaster, with headquarters at Chicago, has been appointed division engineer of the Western division, with headquarters also at Bloomington. L. E. Thornton and R. H. Washburn, assistant engineers at Chicago, have been appointed assistant division engineers of the Eastern and Western divisions, respectively, both with headquarters at Blooming-

#### **PURCHASES AND STORES**

- A. S. MacDonald, division storekeeper on the Canadian Pacific, has been promoted to assistant general storekeeper of the Western lines, with headquarters as before at Winnipeg, Man.
  - A. A. Goodchild, general storekeeper,

eastern lines, of the Canadian Pacific, retired on January 1, after serving that company for the past 44 years. T. Fawcett has been appointed general store-keeper of the system, with headquarters at Montreal, Que.

G. H. Mulvagh, chief clerk in the operating department of the Quebec Central, has been promoted to purchasing agent and storekeeper, with headquarters as before at Sherbrooke, Que., succeeding T. M. Hawkins, who has been promoted to master mechanic, as noted elsewhere in these columns.

Leonard Crassweller, assistant purchasing agent on the Northern Pacific, at St. Paul, Minn., retired at the age of 70 under the pension rules of the company on December 31. C. E. Resler, acting purchasing agent of the Minnesota & International (a subsidiary of the Northern Pacific), with headquarters at St. Paul, has been appointed assistant purchasing agent on the Northern Pacific, to succeed Henry Hansen, who in turn succeeds Mr. Crassweller.

#### **OBITUARY**

Thomas John Fretz, traffic manager of the Lehigh & New England, died suddenly on December 28, following a heart attack.

**B. P. Morse,** vice-president of the Tennessee Central, with headquarters at Nashville, Tenn., died on December 28, at Denver, Colo.

Arthur M. Garvey, assistant valuation engineer of the Central of New Jersey, died on December 25, of pneumonia following a major operation.

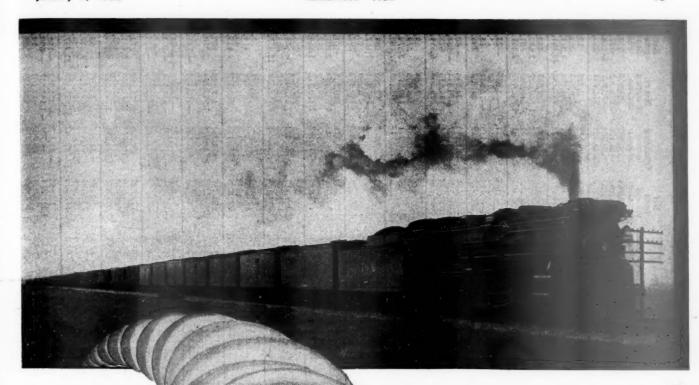
Dr. Edward H. Mathers, medical examiner of the Baltimore & Ohio, with headquarters at Baltimore, Md., died on January 1, after a lingering illness.

Charles C. Graves, assistant general freight agent of the Seaboard Air Line, died of pneumonia at his home in Charleston, S. C., on December 31.

O. H. McCarty, vice-president and general superintendent of the Fort Worth & Rio Grande and the St. Louis, San Francisco & Texas, with headquarters, at Fort Worth, Tex., died on December 17, following a heart attack, at the age of 67 years.

Robert L. Ruby, superintendent of transportation of the Southern Pacific, Pacific Lines, with headquarters at San Francisco, Cal., died on December 26 of injuries received when he was struck by an automobile while crossing a street in Berkeley, Cal.

Frank M. Lahm, supervisor of the Consolidated Ticket Offices at New York, died at his home in that city on December 31, from a complication of diseases. He was 77 years old and had been ill for several weeks. For 28 years, prior to the formation of the Consolidated Ticket Offices in 1918, Mr. Lahm had been in the service of the New York Central.



### NEW POWER Is Paying Handsomely....

N the Illinois Central, modern eight-coupled locomotives, replacing locomotives of the 2-10-2 type built in 1922, operating over a relatively level division, increased train loads 5.3 per cent—from 4,900 to 5,200 tons—with an increase in average speed from 15.75 to 18.8 miles an hour, a reduction in fuel consumption per thousand gross ton-miles of 37 per cent, and a reduction in train operating cost per thousand gross ton-miles of about 34 per cent."

Railway Age, November 21, 1931.

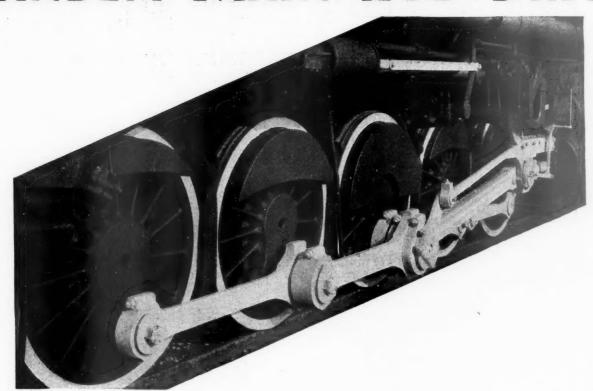
• These are Lima Super-Power Locomotives. What they are doing here they can do elsewhere to the benefit of the operating ratio.

LIMA LOCOMOTIVE WORKS • Incorporated • LIMA • OHIO

Revenues and Expenses of Railways

			Mo	Neven	EMBER AND EL	ELEVEN MONTHS	OF CALE	YEAR	1931	-					Net ry.	105
Av.	Av. mileage		parating revenues		Maintenanc	Cio	-Operating	Trans.			be	railway	income o	- 04	1930.	
Name of road d Akron. Canton & YoungstownNov.	-	Freight. F \$114,541	\$61 786	Total c. misc.) \$125,194 1,785,953	Way and Equip- structures, ment. \$12,596 \$14,866 234,643 181,809		Traffic. p \$10,571 126,511 75,672	\$45,040 \$50,051 \$72,811	General. \$11,358 143,529 53,427	\$94,431 1,235,850 1,693,768	75.4 69.2 86.5 80.3		\$18,592 413,126 59,864 2,345,821	\$5,809 256,002 70,797 718,731	\$38,961 537,387 -168,855 353,162	
11 mos.	1,028 1,028 1	1			2,142,763 3		5,922	29,616	7,579 58,423	58,804 658,176 7,945,804	000		2,432 232,852 2,817,807	8,329 209,863 3,044,408 4,562,788	19,789 268,710 4,211,738 36,161,165	
Atchison, Topeka & Santa Ferral II mos.	9,746 9,669 10			11,428,691			4,350,528 4	3,662,362	-	1,126,331				-	448,983 3,840,803	
Gulf, Colorado & Santa Fe 11 mos.	1,976	1,540,057 15,730,855 920,896 9,848,536	48,646 914,830 54,024 691,848	17,690,418 1,030,062 11,254,058	2,563,903 88,080 1,587,732	3,734,424 207,932 2,323,147	621,428 20,896 221,471	3,300,947	· 646 63	7,788,955	1-	388,261 3,465,103 364		"	2,251,598	
West Point	93	92,345 1,170,403 97,916	22,283 306,851 25,344	1,719,727	239,698 239,698 27,487 270,677	29,226 341,615 37,363 432,770	9,449 112,315 10,265 120,087	57,034 671,549 671,549	2	1,577,437	91.7	142,290 8,374 93,930	1	34,502	13,944 296,379 80,648	
Coast	639	1,235,838	6,752	231,998 3,089,547 3,434,769	64,206 758,623 528,555	62,711 763,124 790,672	25,727 287,135 145,094	1,478,005 1,432,156	17,966 210,595 160,408 1,864,335	297,439 3,598,305 3,075,297 40,032,650	116.5 89.5 80.0	508,758 359,472 10,005,854	685,227 189,454 5,450,785	870,344 134,615 4,226,363	623,622	
	5,158	38,283,854	7,027,376	50,037,904 163,385 2,316,135		29,301 325,232	6,942 78,232 467,936	71,391 853,810 4.578,057	1	1,704,087 8,334,329	73.6	23,195 612,048 2,820,464 36,495,148	8,195 400,467 2,070,951 28,220,747	7,064 363,935 1,740,572 25,080,285	278,510 278,510 2,379,285 7,180,824	RA
Ohio	5,653	9,298,801	980,046	11,154,793	12,729,258	39,321	5,467,545	177,890	17,784	2.742,139	1	1	28,045 160,767	52,249 761,384 6,860	1,167,684 1,167,684 10,788	LWA
Baltimore & Ohio Chic. TermNov.	22.88	53,458	100,781	3,122,308 162,323 1,998,082	360,089	425,297 14,321 156,137	22,363	1,670,203	19,297	1,504,399	75.3	493,683	303,783	110,361	292,135	YA
& Aroostook	100	497,299	14,616		1,290,137	1,229,515	5,171 63,705 3,519	138,371 1,599,166 202,283 2,350,077	306,169 306,169 9,035 107,253	4,511,543 288,377 3,333,362	76.1	1,819,518 90,582 1,573,432	1,271,143	1,150,312	1,664,504	GE
Belt Ry. Co. of Chicago		467,542	. 1		-	196,589 2,233,256 626,944	12,062 145,272 88,590	156,685 2,234,343 1,694,498	37,837 408,736 187,983	446,522 6,123,673 3,261,443	93.3 73.0 78.5	31,750 2,269,113 892,794 14,389,451	2,504,073 658,536 11,468,092	2,452,949 449,442 9,162,532	4,948,726 863,485 11,257,351	
oston & Maine	200					10,585	941,103	20,089,849 25,857 347,139	6,542	50,381	67.0 57.9 73.0	24,795 458,627 33,622	18,391 385,328 28,934	385,328 33,968	31,149 414,280 45,733 415,321	
Brooklyn Eastern Dist. Term	s. 253	1,096,861 109,316 1,264,925	215	1,436,355		338,843	23,981		76,225	1,115,129		321,226	178,264	1,502.274	188,021	
, Rochester & Pittsburgh.			23,824 359,711 1,569	11,828,743 11,828,743	1,358,494	2,955,981 12,455 164,202	28,789 312,377 5,785 69,008	378,611 4,654,515 57,750 570,919	434,086 29,967 133,355	9,733,731 130,128 1,177,806		2,095,012 30,474 197,765		112,130	745,107	
Burlington-Rock Island Canadian Pacific Lines in		1		115,88		1	83,407 2,266	64,618 873,656 65,704	3,350 43,546 2,404 28,511	2,004,836 100,450 1,339,729	99.2 107.2 106.6 107.1	877 -135,291 -6,245 -88,745	259,291 12,945 138,325	454,594	303,529 35,584 326,894	
Canadian Pacific Lines in Vermon					1	1 0		-			88.5	130,529 3,071,616 713,977	29,789 1,816,914 338,320 4,720,851	15,340 1,674,803 251,453 3,766,315	273,507 3,431,026 443,852 6,844,835	
Central New Jersey	os. 1,944 ov. 692 os. 692	2,181,672 2,7,851,727	9	36,584,30	60				-			56,420			1,217,842	
Central Vermont	Nov. 456 mos. 456 Nov. 3,115	6 4,746,341 6 4,746,341 5 8,359,368	45,942 1 762,833 273,317	472,36 6,116,76 9,032,24	5 49,695 3 1,135,947 8 1,206,426 0 14,530,488	1,112,669 1,813,272 20,968,522	197,304 195,712 1,944,545	2,642,665 2,375,833 27,978,515	6.0	5,926,	65.	3,105,906	33,3			
Chicago & Eastern Illinois	2		' -	1,084,28 14,038,77 222,09 2,503,76		2,955,852 23,989 489,340	72,023 779,057 26,565 234,149	508,718 6,316,193 61,832 744,037	60,532 713,113 18,547 211,109	1,030,598 12,701,544 143,840 1,930,868	90.5 90.5 77.1	1,337,233 78,254 572,895	58,701 69,749 488,475	-1,542,637 53,161 422,359	79,356 508,170	

### AGAINTANDEM MAIN ROD DRIVE



#### Cuts Down Maintenance

WITH ordinary side rods, 2-10-2 type locomotives were averaging 30,300 miles between shoppings at a cost of \$.0176 per mile for rod maintenance.

With Tandem Main Rod Drive, similar 2-10-2 type locomotives in exactly the same service averaged 36,800 miles between shoppings and reduced rod maintenance to \$.00294 per locomotive mile.

Here is further evidence that the Tandem Main Rod Drive reduces maintenance costs to a fraction of what they have been.

In addition, the availability of the locomotives was increased 20%.



THE FRANKLIN SLEEVE JOINT Uses flat gasketsthe cheapest to buy when replacement is necessary

FRANKLIN RAILWAY SUPPLY CO., INC.

NEW YORK

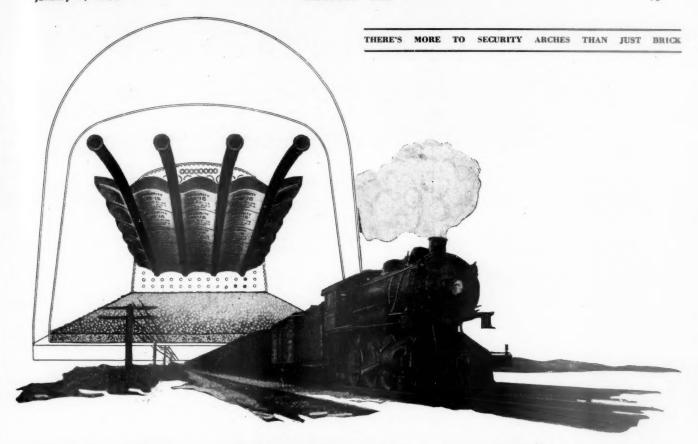
CHICAGO

MONTREAL

Revenues and Expenses of Railways

-CONTINUED
1931-
YEAR
CALENDAR
0.0
MONTHS
ELEVEN
AND
NOVEMBER
40
MONTH

												janua	ry 9, 3:	734
Net rv	sperating income, 1930. \$303,077 16,297,328 1,662,960 26,496,543	2,578,973 1,083 1,044,793	780,269 15,121,073 242,166 2,896,980	1,089,777 17,107,735 180,121 1,546,166	1,914,633 1,914,633 164,370 1,774,670	243,065 1,207,523 192,216 1,993,584	18,224 —140,274 13,123 105,337	9,027 191,603 343,236 5,749,651	749,317 10,377,067 562,918 6,417,276	184,225 991,939 —7,940 31,551	39,572 632,498 -3,647 100,634	3,046,880 23,948 8,366,594	32,587 26,581 335,442 3,135,391	1,094,263 12,810,308 75,763 1,311,872
	Net ry. operating income. \$665,481 6,064,192 1,309,309 19,780,000	2,395,708 -77,525 173,413	384,673 7,740,175 244,786 2,634,309	64,849 11,390,362 118,446 1,698,658	228,589 132,485 1,381,864	173,783 618,963 244,489 2,102,402	21,641 482 11,732 85,851	14,912 9,299 534,447 4,119,038	351,470 6,698,340 463,283 4,800,901	140,731 796,866 11,365 200,901	31,651 394,585 23,795 81,690	929,342 702,235 3,087,791	322,579 17,308 141,134	256,040 9,380,699 63,900 473,953
	Operating income (or loss). \$335,717 \$,957,638 1,647,530 22,666,113	4,597,320 4,597,320 23,562 1,398,436	843,551 12,364,408 170,819 1,821,727	413,452 15,762,257 142,178 2,020,317	42,890 1,084,344 117,620 1,065,512	197,708 878,718 280,012 2,420,765	30,986 113,630 15,076 79,316	12,927 23,670 495,350 4,024,381	341,298 6,749,627 510,394 4,830,919	137,408 741,628 10,938 207,318	75,502 907,426 —16,383	1,101,883 703,122 3,093,750	31,696 352,119 62,483 814,619	430,355 10,585,251 312,540 3,187,705
****	from railway operation. \$281,900 16,605,479 2,437,588 32,047,080	481,728 5,493,331 87,810 2,088,442	1,542,753 20,603,632 223,744 2,349,703	863,015 21,510,478 168,495 2,296,211	2,140,158 177,630 1,750,537	265,977 1,623,972 315,260 2,798,410	36,583 185,603 18,084 116,110	11,927 -17,570 528,157 4,795,084	766,503 11,779,651 660,650 6,587,649	153,413 917,650 18,164 270,764	89,801 1.147,168 —6.026 130,573	65,548 1,628,320 339,694 2,758,805	28,139 2,99,602 77,335 2,006,615	768.323 14,897,726 371,916 3,807,582
	Operating ratio. 95.8 82.6 70.1	69.8 70.5 88.1 79.6	80.5 80.1 53.3	85.8 75.3 61.4 59.1	90.1 87.6 60.7 65.3	65.2 78.1 57.3 62.7	\$2.9 71.9 84.8 88.6	76.5 102.6 77.1 83.2	82.0 78.3 66.4 69.7	39.7 56.4 75.3 71.5	57.6 56.8 113.3 83.8	79.1 69.6 485.3 74.9	139.6 128.6 90.6 84.0	86.1 79.8 59.4 62.6
	Total. \$6,394.501 78,853,892 5,708,487 71,602,929	1,114,175 13,136,113 651,464 8,172,749	6,383,815 83,121,704 199,954 2,678,680	5,233,317 65,737,666 267,563 3,317,086	1,189,956 15,163,232 273,964 3,290,652	497,880 5,798,121 422,464 4,705,710	41,159 475,624 100,913 901,109	38,764 696,941 1,777,534 23,801,905	3,490,727 42,597,441 1,306,498 15,172,939	1,189,258 55,237 680,634	1,506,047 51,281 676,372	3,727,681 427,857 8,217,082	99,274 1,348,912 747,669 10,525,623	4,774,564 58.952,834 544,486 6,378,517
CONTINUE	General. \$327,418 4,012,750 328,582 3,873,528	53,525 643,968 31,624 366,087	305,832 3,635,753 13,970 190,601	339,571 3,723,731 20,517 242,737	73,379 904,149 15,900 193,677	36,964 430,722 36,967 415,495	1,609 19,792 10,625 122,954	3,914 37,997 146,456 1,645,940	160,306 1,892,636 83,444 945,222	10,794 120,857 4,045 47,139	7,744 -90,234 - 4,160 43,694	23,564 308,054 36,634 429,922	59.35 59.850 59.850 59.850	289,512 3,137,928 41,303 456,354
	Trans- portation. \$3,044,203 38,415,948 2,973,859 35,089,227	589,680 6,869,716 344,139 4,203,546	3,265,999 39,893,093 146,243 1,706,976	2,689,710 33,029,695 149,292 1,718,632	631,035 7,844,097 88,188 1,086,278	230,353 2,639,250 203,758 2,215,543	23,013 259,400 38,837 396,553	19,591 395,757 770,647 10,571,903	1,938,504 23,057,099 641,163 6,767,642	38,723 361,474 24,947 300,256	60,571 751,222 31,471 446,867	1,829,509 1,829,509 136,456 2,754,770	43,882 568,496 392,823 5,393,110	2.429.178 28,745.238 259,980 3,034,902
OF CALENDA	Traffic. \$159,462 \$2,165,090 32,706,466 3	76,821 893,992 32,961 380,894	284,532 3,101,146 1,741 20,103	2,554,005 19,537 224,983	35,339 427,533 17,498 204,910	15,468 172,916 17,729 213,918	3,827 42,816	5,273 58,269 627,843	1,480,723 1,480,723 52,026 586,277	21,721 21,269 1,329 17,756	7,492 84,523	13,625 140,978 3,157 41,468	3,783 45,211 14,362 171,602	1,819,507 27,105 318,917
EN MONINS	sance of Equipment. \$1,464,221 18,992,303 1,272,900 16,139,436	2,101,188 160,338 2,102,720	1,617,183 20,114,675 20,000 365,000	1,329,173 15,859,200 40,363 444,624	258,639 3,241,620 106,427 1,240,785	136.739 1,468,179 100,977 1,084,587	4,111 44,817 13,960 164,744	9,705 166,918 586,613 6,940,664	875,135 10,349,740 302,794 4,097,750	25,007 349,189 11,720 156,635	25,133 293,532 8,112 96,310	58,433 840,728 182,386 2,877,034	24,838 349,225 172,769 2,606,381	1,278,710 15,579,173 118,153 1,301,326
ER AND ELLEV	Maintenance of Way and Equips structures. ment. \$1,350,000 \$1,464,22,444 18,992,31,272,944,013 16,139,4,133,16,139,4	246,268 2,590,320 73,263 1,021,827	888,009 16,368,990 18,000 396,000	613,527 9,693,904 34,740 651,730	2,632,873 45,951 565,687	77.626 1,066,973 62,438 749,320	12,351 151.849 33,715 174,126	5,189 90,996 203,319 3,913,304	362,222 5,388,076 218,136 2,612,262	25,110 336,469 13,198 161,664	21,077 296.366 7,538 89,465	27,446 624,287 69,275 2.114,331	297,344 107,859 1,770,080	610,589 9.350,930 98,524 1,273,928
OF TACABLE	Total (inc. misc.) \$6.676,401 95,459,371 8,146,075	1,595,903 18,629,444 739,274 10,261,191	7,926,568 103,725,336 423,698 5,028,383	6,096,332 87,248,144 436,058 5,613,297	1,321,114 17,303,390 451,594 5,041,189	7,504,120 7,504,120	77,742 661,227 118,997 1,017,219	50,691 679,371 2,305,691 28,596,989	4,257,230 54,377,092 1,967,148 21,760,588	2,106,908 73,401 951,398	2,653,215 45,255 806,945	313,417 5,356,001 88,163 10,975,887	71,135 1,049,310 825,004 12,532,238	5.542,887 73.850,560 916.402 10,186,099
MONT	Passenger \$925,333 13,660,811 702,022	77,572 1,173,190 68,978 987,182	8,265,935	680,739 9,420,655 34,254 438,215	2,222,683 2,222,683 2,910 62,487	36,711 551,181 50,096 744,322	728 12,622 4,894 65,088	1,942,756	8,002,780 96,142 1,645,772	6,459 88.074 3,266 53,644	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	702 11,493 2,178 37,367	5.837 79,783 13 57	528.606 7,075.139 26.798
	Freight 1,983,63 1,263,16 1,507,88	1,414,273 16,170,457 583,646 8,210,431	6,592,790	4,800,521 69,658,175 462,604 5,092,342	1,061,141 13,547,051 442,477 4,888,457	664,123 6,172,690 555,251 5,986,436	73,524 611,528 108,399 895,735	30,440 373,098 2,039,278 24,632,645	2,983,261 38,942,186 1,761,997 18,637,600	235,960 1,863,283 63,408 800,729	2,614,601	302,237 5,178,535 67,655 9,585,755	62.418 890.985 761.300 11,413,389	4,509,486 60,311,105 839,580 9,067,133
	Operated during period.  v. 8,458 8,78. v. 9,307 0.0. 9,313 82,9313 82,000	1,495	11,238 11,306 20 20	7,620 7,598 721 678	1,736 1,736 309 309	1,037 1,037 693 695	270 270 167 167	20 20 858 875	998 998 2,557 2,550	232 242 242 242	50 50 19	563 564 564	871 744 747 747	2.046 2.046 269 269
*	& North WesternNo Burlington & Quincy	Great WesternNov. Indianapolis & LouisvilleNov. 11 mos.	Mil., St. Paul & PacNov. River & IndianaNov.	Rock Island & PacificNov.	t. Paul, Minn. & OmahaNov. 11 mos. Id R. R. 11 mos. 11 mos.	do & SouthernNov.  11 mos. Worth & Denver CityNov.	a Valley	gh & Black LickNov. 11 mos. & HudsonNov.	, Lackawanna WesternNov. 11 mos. & Rio Grande WesternNov. 11 mos.	& Salt Lake	Toledo Shore LineNov.  11 mos.  1 mos.	Toledo & IrontonNov.  11 mos.  Missabe & NorthernNov.	Winnipeg & PacificNov.	& Erie
	Nar Chizago Chicago,	Chicago,	Chicago, Chicago	Chicago, F	Chic., St.	Colorado Ft. W	Wichita	Conemaugh Delaware	Delaware, Denver &	Detroit	Detroit &	Duluth,	Duluth, Elgin, Jo	Erie



#### BRICK + DESIGN + SERVICE =

#### A Satisfactory Arch Brick Supply

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Kentucky

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DENVER SEWER PIPE & CLAY CO. Colorado

ATHENS BRICK & TILE CO. Texas

MOULDING-BROWNELL CORP.

GLADDING-MeBEAN & CO. California Washington

DIAMOND FIRE BRICK CO. Colorado

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Sound design and satisfactory servicing are guaranteed by the 22 years which American Arch Company has devoted to these activities.

American Arch Company alone possesses all three essentials.

#### AMERICAN ARCH COMPANY

**NEW YORK** 

CHICAGO

LOCOMOTIVE COMBUSTION SPECIALISTS

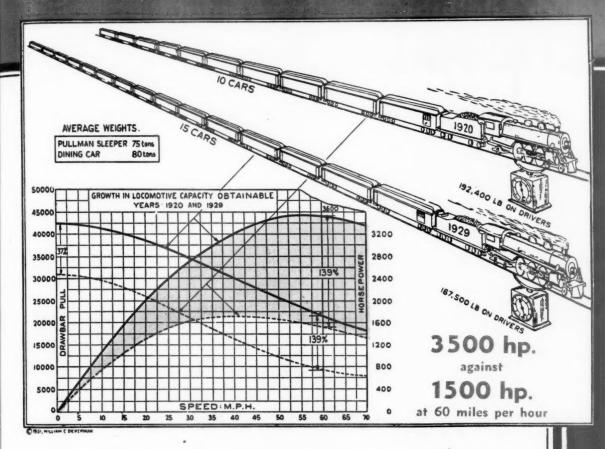
## Revenues and Expenses of Railways

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1931-CONTINUED

#### MORE PULLMANS AT NO SACRIFICE IN SPEED

67,409,642

30,339,867



HE dotted curves and the solid curves represent the important operating characteristics of the 1920 and 1929 locomotives respectively in actual passenger service on the same railroad.

The 1929 locomotive has nearly 5,000 lb. less weight on drivers than the 1920 locomotive. Yet, despite this lighter weight, progressive refinements in design and greater sustained capacity have made it possible for the new locomotive to develop 37 per cent more drawbar pull at starting, and 139 per cent more drawbar pull at passenger express speed of 60 miles per hour.

This big increase in drawbar pull has permitted important changes in passenger train movements which have resulted in substantial reductions in operating costs.

The 1929 locomotive now hauls fifteen Pullmans at the same rate of speed instead of the ten previously hauled by the earlier locomotive. If offered, it can haul more than fifteen Pullmans, on the particular runs for which it was built. The longer trains reduce the number of sections on limited trains during times of heavy traffic. Fewer diners are necessary. Every time two trains are combined into one, costs are reduced, track capacity is increased, and the headway between trains increased.

American Locomotive Company
30 Church Street New York N.Y.



# Revenues and Expenses of Railways Month of November and Eleven Months of Calendar Year 1931—Continued

				MAUNTA	OF MOVEMBER	A AND LABOR.	N MONTHS OF	CALENDAR	1 EAR 1731	CONTINO							
	Name of road	Av. mileage operated during period.	Freigh	Operating revenues	Total (inc. misc.)	Maintena Way and structures.	nance of Equip-	Operating Traffic.	Trans-	General.	Total.	Operating ratio.	Net from railway operation.	Operating income (or loss).	Net ry. operating income.	Net ry. operating income, 1930.	
	Maine Central	1,121	10,	\$99,823 1,898,737 1,309 25,392	\$980,742 13,858,834 166,458 1,957,867	\$155,967 2,156,002 23,928 319,665	\$175,298 2,267,360 23,879 218,983	\$18,024 223,733 4,400 52,616	\$451,123 5,497,648 44,613 518,253	\$43,615 497,189 7,904 107,451	\$843,857 10,663,964 103,273 1,209,775	86.0 76.9 62.0 61.8	\$136,885 3,194,870 63,185 748,092	\$64,751 2,270,478 51,271 611,569	\$29,393 1,781,555 37,959 481,292	\$123,155 2,688,817 29,687 826,138	
	Minneapolis & St. LouisNov.  Minneapolis, St. Paul & S. S. MarieNov.  11 mos.	1,627 1,627 4,346 4,367	665,238 8,649,675 1,724,719 22,228,537	23,613 345,875 107,397 2,040,491	738,876 9,611,315 2,003,934 26,703,665	82,353 1,313,152 308,551 3,818,534	1,901,769 408,448 5,212,343	35,896 405,388 73,933 832,651	364,948 4,480,290 908,011 11,110,850	44,099 523,430 109,958 1,309,115	683,398 8,620,579 1,812,322 22,418,052	92.5 89.7 90.4 84.0	55,478 990,736 191,612 4,285,613	15,278 454,838 701 1,971,178	-12,441 123,533 -141,650 429,500	8,675 583,439 257,832 4,226,931	
	Duluth, South Shore & AtlanticNov. Spokane InternationalNov. 11 mos.	560 560 163 163	2,052,709 44,292 624,608	13,524 232,509 2,460 36,949	175,080 2,556,326 50,810 714,497	23,024 504,963 15,672 175,540	44,373 482,820 2,527 65,862	7,457 84,157 3,292 36,146	89,078 1,158,429 23,058 273,430	8,895 106,024 4,776 59,851	2,351,713 49,395 616,979	99.6 92.0 97.2 86.4	204,613 1,415 97,518	-28,244 -121,429 -3,391 41,816	-32,830 -179,981 -7,683 -1,985	-38,287 348 4,569 79,877	
	Mississippi Central	. 150 364 364	65,457 886,730 104,186 1,012,371	1,802 24,842 1,425 23,687	69,443 940,415 111,418 1,102,953	11,053 144,068 27,155 270,738	11,790 133,075 14,799 157,595	8,252 94,378 9,505 103,489	21,977 273,427 38,585 433,837	6,253 70,241 8,393 88,917	59,325 715,157 98,242 1,053,291	85.4 76.0 88.2 95.5	10,118 225,258 13,176 49,662	22,960 178,187 10,647 21,812	19,127 131,532 174 —91,473	11,636 125,655 —21,714 21,576	
	Missouri-Illinois	202 202 3,188 3,188	89,884 1,203,666 2,165,097 25,313,389	9,765 225,593 3,141,760	92,752 1,240,823 2,647,590 31,593,505	17,561 194,962 245,221 3,695,928	15,578 246,525 265,389 4,893,673	3,046 36,991 125,550 1,400,012	29,982 381,108 937,916 10,752,455	5,792 66,927 136,868 1,699,895	71,955 924,751 1,727,836 22,635,903	77.6 74.5 65.3 71.6	20,797 316,072 919,754 8,957,602	18,452 256,314 709,660 6,687,560	8,237 159,443 520,976 4,496,416	13,979 279,979 1,520,132 9,390,117	
	Missouri Pacific	7,430 7,444 1,037 1,037	5,818,677 74,801,700 572,072 8,830,514	6,644,575 46,519 721,582	6,863,336 89,228,018 667,913 10,185,295	883,412 10,921,410 75,909 1,408,352	1,185,826 15,188,823 149,468 1,832,920	269,917 2,997,941 40,035 472,562	2,753,477 32,417,449 230,698 2,901,056	326,563 3,662,031 56,043 644,388	5,485,335 65,399,289 559,878 7,272,734	. 79.9 73.3 83.83 71.40	1,378,001 23,828,729 108,035 2,912,561	1,131,996 20,086,072 58,632 2,370,559	862,748 16,188,814 23,739 1,608,090	1,490,283 19,252,312 60,134 3,146,801	
	International-Great NorthernNov. 11 mos. San Antonio, Uvalde & GolfNov. 11 mos.	1,159 1,159 316 316	791,940 14,590,156 51,810 1,059,830	86,034 1,134,053 5,477 99,358	990,574 16,934,896 62,896 1,254,483	2,245,811 18,144 343,845	2,616,975 14,480 181,190	33,090 402,171 5,050 58,491	430,729 6,390,682 30,135 343,280	58,566 691,605 6,105 69,131	836,227 12,344,038 71,720 992,215	84.42 72.89 114.0 79.1	154,347 4,590,858 8,824 262,268	4,126,298 -13,508 210,358	2,433,834 —37,836 —84,478	19,855 806,402 -23,863 99,746	
	Mobile & Ohio	1,152	661,066 8,480,301 341,193 4,238,084	24,925 387,084 1,401 27,377	726,419 9,437,694 344,817 4,296,124	121,806 1,398,144 15,000 500,000	1,839,105 25,000 460,000	50,602 547,033 1,297 14,644	335,142 4,011,937 85,404 1,031,185	49,397 540,488 8,666 109,174	719,207 8,320,333 135,367 2,114,469	99.0 88.2 39.3 49.2	7,212 1,117,361 209,450 2,181,655	39,997 471,557 189,523 2,007,914	—95,630 —180,287 115,926 1,159,731	-92,293 740,297 99,932 1,265,185	
	Monongahela Connecting	572	156,161		48,593 930,447 156,309 2,005,211	11,395 135,675 28,371 251,628	22,541 264,960 37,226 446,842	250 3,043 1,474 15,734	34,190 507,770 39,213 501,209	2,544 30,439 12,989 86,095	70,920 941,887 119,273 1,299,467	145.9 101.2 76.3 64.8	-22,327 -11,440 37,036 705,744	-27,891 -71,533 34,943 682,655	-28,241 -70,212 53,181 870,909	8,062 204,734 76,444 915,304	
C	Nashville, Chattanooga & St. LouisNov	1,203 1,203 165 165	962,481 11,485,396 29,952 379,323	93,135 1,326,958 2,401 20,956	1,159,882 14,124,240 36,400 453,910	172,282 2,396,605 9,691 121,728	2,942,690 7,030 57,840	65,106 750,091 908 10,679	476,826 5,636,307 11,543 124,764	68,407 825,743 4,500 51,114	1,027,208 12,613,371 33,671 366,072	88.6 89.3 92.5 80.6	132,674 1,510,869 2,729 87,838	88,223 944,637 6,630 260,559	86,568 802,342 2,864 -228,505	2,035,408 2,788 187,487	
ontinued	Newburgh & South ShoreNov.  New Orleans Great NorthernNov.  11 mos.	264 264	165,039	8,330	68,262 877,570 179,124 2,181,918	4,061 130,514 14,895 190,508	19,755 248,217 21,336 282,477	13,870	32,127 417,136 55,755 650,826	5,545 71,977 10,004 112,638	61,488 867,844 115,860 1,393,691	90.1 98.9 64.7 63.9	6,774 9,726 63,264 788,227	25,458 84,645 60,027 687,417	31,400 49,524 36,024 424,828	6,636 147,598 -6,138 257,327	
on Next	New Orleans Terminal	20 20 11,421 11,421	1,812 22,100 17,881,927 28,880,331	5,948,829	1,649,371 27,534,690 354,971,025	12,162 169,511 3,326,315 45,314,420	7,480 96,506 5,873,807 75,704,279	690,481 8,175,086	37,188 503,918 11,152,471 34,703,464	1,265,503 1,675,836	57,682 786,215 22,763,160 84,123,120	34.7 47.7 82.7 80.0	108,330 863,156 4,771,530 0,847,905	96,371 731,589 2,181,003 0,848,294	76,066 493,281 995,539 27,511,513 5	105,046 463,169 1,942,643 4,236,035	
Left Ha	Indiana Harbor BeltNov. Pittsburgh & Lake ErjeNov.	118 118 234 234	1,217,931	78,734	690,003 8,528,036 1,333,388 16,676,063	105,000 868,000 117,9\$5 1,553,284	50,000 895,000 385,244 5,068,534	4,585 51,209 33,129 367,475	299,275 3,710,969 530,188 6,563,936	23,259 302,347 70,083 840,885	506,165 6,028,348 1,139,793 14,431,954	73.4 70.7 85.5 86.5	183,838 2,499,688 193,595 2,244,109	2,017,590 92,920 1,097,622	62,294 1,396,379 255,099 3,079,827	2,286,884 519,077 6,978,835	
ind Page	New York, Chicago & St. LouisNov. 11 mos. N Y., New Haven & HartfordNov. 11 mos.	1,698 1,698 2,070 2,099	2,393,536 31,396,260 4,180,899 50,547,071	92,757 1,361,995 2,528,269 31,725,126	2,598,077 34,044,160 7,604,793 92,889,575	350,769 4,656,552 1,025,666 13,099,944	499,854 5,911,830 1,057,939 13,706,186	1,344,234 1,344,234 112,265 1,095,746	1,121,365 13,063,772 2,616,978 31,379,429	1,402,351 2,73,506 3,169,174	2,210,136 26,299,376 5,225,574 64,132,994	85.1 77.3 68.7 69.0	387,941 7,744,784 2,379,219 8,756,581	179,470 5,331,854 2,128,512 3,848,915	2,336,089 1,548,275 7,188,299	217,889 5,535,628 2,232,749 2,950,680	

### ALLOY IROS STAYBOLTS drive up better



Besides greater corrosion resistance and improved physical qualities, Republic's alloy staybolt irons work more easily.

Toncan Iron, Agathon Nickel Iron or Climax, drives up solidly without cracking.

That means fewer leaky bolts and less trouble at the roundhouse.

Many roads report locomotives running from shopping to shopping without a single leaky or broken bolt.

Use these modern staybolt irons for lower maintenance.



REPUBLIC STEEL
CORPORATION

# Revenues and Expenses of Railways Month of November and Eleven Months of Calendar Year 1931—Continued

			MONTH	OF NOVEMBE	R AND ELEV	EN MONTHS	OF CALENDAR	K YEAR 1951-	CONTINUED	0					
Name of road	Av. mileage operated during		Operating revenues	Total	Maintenar Way and	nance of Equip-	Operating	g expenses-	1	1	Operating	Net from railway	Operating	Net ry.	Net ry. operating income,
New York ConnectingNov.	20 20 20 568 568	\$148,512 1,809,389 594,877 7,821,256	\$ 19,780 1,082,353	\$164,625 2,016,010 747,331 10,493,437	\$12,818 242,345 35,754 1,207,459	\$9,515 90,587 160,088 1,804,633	13,232	\$34,352 393,124 346,969 4,116,884	\$1,214 13,088 26,285 304,658	\$57,899 739,144 577,445 7,624,513	35.2 36.7 77.3	\$106,726 1,276,866 169,886 2,868,924	\$70,726 877,266 141,283 2,427,335	\$34,661 547,496 62,567 1,645,975	\$81,435 911,901 —6,114 866,687
Norfolk & Western	22,282,282,282,282,282,282,282,282,282,	5,906,134 68,838,981 396,824 5,220,109	166,265 2,435,966 9,795 171,554	6,302,146 73,957,068 429,160 5,661,834	858,815 8,987,967 82,905 880,700	1.190,161 14,187,203 74,171 869,462	1,398,100 25,252 275,362	1,585,632 19,186,856 191,795 2,311,251	278,146 2,861,425 22,545 271,463	4,082,917 46,726,128 396,359 4,606,717	64.8 63.2 92.4 81.4	2,219,229 27,230,940 32,801 1,055,117	1,544,186 19,750,984 2,102 554,383	1,778,581 21,446,469 373,220	2,517,511 31,127,356 51,707 693,618
Northern Pacific	6,733 6,784 441 441	4,001,468 47,513,895 1,37,471 2,309,048	315,070 5,057,175 90,219 1,241,786	4,749,884 58,130,891 255,986 3,929,336	388,841 7,568,828 65,163 827,680	1,081,778 13,044,640 44,964 624,182	2,172,413 5,316 64,731	1,888,111 21,910,344 162,154 1,956,068	256,265 2,830,960 17,146 186,722	3,828,122 48,421,817 294,677 3,654,914	80.6 83.3 115.1 93.0	921,762 9,709,074 -38,691 274,422	2,604,994 -70,108 -96,785	5,767,331 -221,140	1,835,738 13,336,647 -97,564 106,446
Oklahoma City-Ada-AtokaNov. PennsylvaniaNov. 11 mos.	132 10,914 10,914	36,607 571,364 22,602,817 294,291,529	1,003 14,829 5,837,357 80,640,108	40,269 613,733 31,914,045 417,291,673	6,891 164,900 2,682,380 47,298,444	4,626 45,803 6,136,602 86,062,849	1,247 14,659 681,457 8,455,969	13,755 185,463 13,110,478 162,208,681	2,761 32,236 1,480,934 17,249,563	28,786 435,959 24,530,768 326,974,991	71.5 71.0 76.9 78.4	11,483 177,774 7,383,277 90,316,682	6,394 122,167 4,967,526 61,121,369	1,863 -1,496 3,650,891 48,136,625	8,406 -21,654 5,480,442 88,505,147
Long IslandNov.  Peoria & Pekin UnionNov. 11 mos.	404 404 17	669,194 8,762,381 8,242 94,401	1,721,128 23,060,167 4,466	2,531,123 33,534,881 71,847 996,495	266,552 3,077,6.6 7,466 133,486	404,253 4,850,801 7,509 112,974	13,684 189,488 2,577 51,830	1,148,658 13,363,306 40,310 512,685	59,218 666,117 7,435 83,205	1,892,322 22,149,726 65,297 894,180	74.8 66.0 90.9 89.7	638,801 11,385,155 6,550 102,315	485,792 8,985,543 —7,950 —64,985	257,382 6,838,474 13,371 189,280	460,756 7,426,607 43,516 396,238
Pere Marquette	2,264 2,264 102 102	1,842,037 22,357,427 80,738 848,378	76,191 1,402,114 579 11,293	2,035,027 25,321,659 82,071 867,704	328,756 4,274,443 5,385 118,413	4,998,580 20,598 224,364	68,033 782,267 1,882 18,141	838,014 10,119,812 23,226 229,795	1,161,805 4,142 45,090	1,746,955 21,421,967 55,233 635,803	85.8 84.6 67.3 73.3	288,072 3,899,692 26,838 231,901	2,279,513 2,279,513 25,603 217,948	63,808 1,199,073 24,420 226,643	202,689 4,666,402 11,891 283,753
Pittsburgh & West VirginiaNov. Pittsburgh, Shawmut & NorthernNov. 11 mos.	138 117 198 198	188,826 2,433,023 95,471 1,153,299	19,690 511 4,235	2,703,506 2,703,506 97,643 1,179,505	17,004 298,720 15,248 214,919	60,579 717,986 20,270 214,023	15,996 205,540 1,546 17,367	47,473 600,455 36,380 407,258	14,728 186,921 7,385 74,650	2,103,186 80,829 928,217	78.5 77.8 78.7 78.7	44,540 600,320 16,814 251,288	13,419 298,099 14,051 220,402	38,383 575,791 6,422 178,306	83,517 1,480,571 12,307 147,606
Quincy, Omaha & Kansas CityNov.  ReadingNov.	249 249 1,458 1,456	31,376 383,393 4,558,572 57,127,763	2,555 34,492 348,098 4,200,581	38,415 473,238 5,253,499 65,472,226	21,725 225,698 291,074 9,012,370	3,439 56,411 975,774 16,019,698	581 9,067 102,108 1,004,484	18,937 212,685 2,192,460 26,634,204	1,891 23,462 197,700 2,358,357	45,931 525,744 3,778,480 55,263,789	119.6 111.1 71.9 84.4	7,516 -52,506 1,475,019 10,208,437	-12,290 -104,864 1,384,297 7,942,421	—15,015 —132,378 1,407,968 7,656,197	8,995 43,762 1,363,950 11,252,895
Atlantic CityRov. 22 mos. Richmond, Fredericksburg & Potomac. Nov. 11 mos.	163 163 117	82,387 1,098,836 305,513 4,473,070	44,919 1,315,287 132,852 2,197,819	139,168 2,581,062 550,651 8,206,660	47,171 504,254 51,839 856,111	18,164 233,147 134,724. 1,604,147	2,137 48,172 9,486 108,007	1,727,571 1,727,571 232,582 3,057,808	3,951 51,624 32,729 399,408	2,566,507 472,486 6,205,104	141.7 99.4 85.8 75.6	—58,083 14,555 78,165 2,001,556	-98,550 -431,441 46,295 1,614,153	-103,057 -535,475 9,286 1,022,128	-124,534 -754,765 81,439 1,120,038
Rutland	413 413 5,266 5,266	204,539 2,516,189 3,194,935 41,687,633	39,431 648,971 314,152 4,906,604	336,692 4,220,362 3,839,047 50,909,057	57,824 840,947 513,759 5,605,022	66,783 808,156 813,563 9,210,720	14,671 131,077 114,895 1,296,701	1,806,882 1,551,305 18,313,645	14,430 181,714 185,019 2,180,639	310,248 3,775,548 3,200,681 36,965,942	92.1 89.5 83.4 72.6	26,444 444,814 638,366 13,943,115	205,230 205,230 267,885 10,113,261	9,211 259,789 298,907 9,741,640	32,215 575,741 1,134,673 15,579,174
Ft. Worth & Rio GrandeNov. St. Louis, San Francisco & TexasNov. 11 mos.	233 233 262 262	56,114 515,820 133,306 1,210,920	2,803 37,894 3,575 64,967	66,217 631,947 140,760 1,331,013	15,283 200,226 24,467 253,798	13,054 146,615 20,987 213,489	3,012 34,033 5,979 64,903	33,130 374,455 50,794 567,261	3,967 44,566 7,730 84,987	68,356 798,896 109,950 1,185,034	103.2 126.4 78.1 89.0	2,139 -166,949 30,810 145,979	-216,920 26,279 98,867	—15,443 —315,416 4,252 —233,353	-264,954 62,517 -29,999
St. Louis Southwestern LinesNov. San Diego & ArizonaNov.	1,913 1,913 155 155	1,261,801 15,130,736 26,276 537,630	24,082 401,075 6,159 136,522	1,375,559 16,568,303 34,199 697,656	136,193 1,840,928 9,113 140,322	2,424,439 2,424,439 11,931 155,004	91,198 1,032,378 2,827 35,574	425,340 5,493,113 17,896 234,096	76,267 885,465 6,443 76,045	946,331 11,740,269 49,038 652,557	68.8 70.9 143.4 93.5	429,228 · 4,828,034 · — 14,839 · 45,099	338,602 3,838,708 —19,323 —10,749	259,526 2,306,368 —16,822 11,643	2,159,856 2,159,856 6,606 150,077
Seaboard Air Line, 11 mos. Southern Ry. 11 mos. 11 mos.	4,478 4,480 6,730 6,730	2,493,913 31,546,814 5,958,996 72,254,976	240,055 3,910,509 733,320 11,330,424	3,007,267 39,230,229 7,271,506 90,901,810	475,044 6,362,755 1,144,201 14,108,166	620,804 7,724,914 1,538,348 18,834,170	1,940,031 169,787 2,298,043	1,172,088 14,671,196 2,808,125 34,339,687	1,926,940 298,920 3,666,277	2,618,067 32,930,311 6,008,435 73,895,244	87.1 83.9 82.6 81.3	389,200 6,299,918 1,263,071 17,006,566	3,281,444 753,557 10,073,957	2,518,382 569,262 7,931,306	455,485 5,514,319 1,415,634 7,700,179
Alabama Great SouthernNov. Cinn., New Orleans & Tex. PacNov. 11 mos.	315 338 338 338	342,676 4.566,647 810,111 11,399,132	47,295 730,820 72,095 1,245,190	419,157 5,718,189 941,962 13,470,235	116,037 1,202,620 199,577 2,492,627	105,571 1,393,063 248,433 3,307,369	15,503 176,521 31,571 376,765	153,102 2,038,649 299,779 4,077,297	20,230 235,506 49,112 579,047	5,094,143 832,732 10,901,331	98.9 88.4 80.9	4,769 624,046 109,230 2,568,904	-23,868 178,471 53,412 1.779,121	289,433 49,896 1,782,280	31,281 1,008,859 195,557 3,161,926



#### BETTER FIRES

FIREBAR CORPORATION OHIO.

# Revenues and Expenses of Railways Month of November and Eleven Months of Calendar Year 1931—Continued

												1			
Name of road	operated during period.	Freight	Operating revenues,	Total (inc. misc.)	Maintenanc Way and Structures.	nance of Equip-	Traffic.	Trans- portation.	General.	Total.	Operating ratio.	from railway operation.	Operating income (or loss).	Net ry. operating income.	operating income, 1930.
Georgia Southern & FloridaNov.  New Orleans & NortheasternNov.	397 397 204	\$139,660 1,972,979 157,009 2,280,662	\$22,207 448,836 24,356 365,475	\$178,262 2,638,942 196,759 2,854,485	\$50,283 596,574 49,148 541,201	\$42,816 640,400 54,317 685,060	\$1,594 21,555 5,182 103,075	\$67,300 965,438 75,154 1,072,882	\$2,529 29,550 12,544 150,459	\$166,888 2,296,368 198,549 2,579,181	93.6 87.0 100.9 90.4	\$11,374 342,574 -1,790 275,304	\$5,331 119,693 -32,127 -148,106	\$1,816 134,729 45,049 —363,113	\$36,421 338,422 2,438 195,833
Northern Alabama	9,110 9,120 9,120	60,945 590,872 7,126,992 99,207,049	1,831,527 25,075,670	63,614 632,360 9,898,867 136,666,822	23,252 183,388 1,103,368 15,931,416	1,564 24,657 1,568,168 22,348,579	1,115 17,020 324,464 3,870,981	20,049 233,946 3,944,161 48,267,591	2,468 29,923 593,739 6,605,474	48,448 488,850 7,756,827 99,738,903	76.2 77.3 78.4 73.0	15,166 143,510 2,142,040 36,927,919	9,990 84,101 998,024 24,112,141	77,108 717,106 19,339,599	7,410 49,480 2,122,731 33,247,231
So. Pacific Steamship LinesNov. II mos. Texas & New OrleansNov. 11 mos.	4,700	439,893 5,038,886 2,748,098 33,662,967	23,239 473,377 344.607 5,073,362	488,004 5,870,511 3,487,744 43,290,117	21,686 224,341 583,136 6,837,013	33,622 1,404,513 667,736 8,188,745	19.278 221,273 146,003 1,704,381	355,701 4,366,522 1,213,147 15,292,874	30,856 349,017 239,040 2,555,608	461,143 6,565,666 2,867,361 34,743,365	94.5 111.8 82.2 80.3	26,861 695,155 620,383 8,546,752	25,085 709,253 353,729 5,640,183	24,953 -710,390 138,332 2,986,988	-45,126 -338,572 903,464 7,844,387
Spokane, Portland & SeattleNov. Tennessee CentralNov. 11 mos.	22955	359,914 4,647,050 172,801 2,241,005	35,636 599,586 5,960 80,683	431,963 5,753,907 187,728 2,433,214	69,172 699,720 27,321 448,151	74,448 867,021 27,183 390,380	10,837 128,859 7,915 92,140	159,385 1,864,846 73,424 897,365	23,139 255,387 12,090 145,917	338,047 3,834,857 148,189 1,970,783	78.3 66.6 78.9 81.0	93,916 1,919,050 39,539 462,431	5,621 959,503 34,061 401,447	9,343 847,303 19,529 230,323	76,031 1,204,089 26,469 365,187
Terminal R. R. Assn. of St. LouisNov. Texas & PacificNov.	55 1,950 1,951	1,867,744	208,359	525,815 7,260,340 2,296,838 27,897,803	65,436 925,182 277,765 3,355,321	36,786 651,449 373,547 4,557,016	4.260 43.614 76.340 872,073	3,533,839 7,35,770 8,813,618	23,830 246,287 116,399 1,270,618	410,229 5,432,437 1,596,516 19,051,842	78.0 74.8 69.5 68.3	115,586 1,827,903 700,322 8,845,961	44,215 886,515 575,304 7,345,631	113,734 1,706,938 466,834 5,422,026	2,133,495 500,658 6,528,059
Texas Mexican	162 162 239 239	34,786 660,822 113,476 1,485,524	1,010 17,599 62 1,007	40,679 786,093 115,825 1,516,936	8,816 157,349 27,867 293,420	9,751 161,580 12,227 144,808	3.314 37,079 13,981 163,379	26,380 377,003 44,086 529,611	6,551 81,123 9,483 100,730	54,639 809,601 107,644 1,231,948	134.3 103.0 92.9 81.2	-13,960 -23,508 8,181 284,988	-18,973 -78,718 5,712 233,774	3,900 3,230 3,514 146,507	27,806 43,231 291,440
Toledo Terminal	28 128 128	26,328	108,952	72.993 917,412 55,890 848,995	4,156 129,851 13.068 168,908	12,672 146,638 12,743 130,091	581 6,370 941 12,132	30,067 385,074 30,734 433,174	4,502 53,250 3,183 40,101	51,977 721,121 60,669 784,406	71.2 78.6 108.6 92.4	21,016 196,291 4,779 64,589	35,572 35,430 9,889 866	23,839 295,440 —11,792 —27,261	41,670 282,213 8,292 3,927
Union R. R. of Penna	45 3,768 3,766	5,620,010 67,017,242	555,590	257,851 4,626,959 6,785,704 83,288,884	58,447 800,002 268,205 8,228,538	1,514,773 1,083,527 16,979,362	1,762 1,762 1,800,377	2,170,032 2,063,063 24,344,212	14,009 156.772 315,523 3,733,749	352,174 4,643,300 3,961,797 56,470,933	136.6 100.4 58.4 67.8	2,823,907 6,817,951	338,556 325,160 2,948,744 21,250,620	377,964 872,159 2,601,366 17,674,327	32,517 2,269,141 2,085,322 23,760,988
Oregon Short LineNov. Oregon Wash. R. R. & Nav. CoNov. 11 mos.	2,530 2,336 2,337	1,830,935 21,371,796 1,095,639 14,577,060	1,995,234 1,995,234 103,392 1,560,398	2,089,673 25,306,541 1,339,208 18,087,500	3,773,817 123,011 3,065,816	255,977 3,911,146 151,242 2,556,195	45.273 567,176 61,925 764,677	692,803 8,053,422 581,856 7,147,471	1,365,530 1,365,530 110,900 1,327,788	1,274,808 18,150,251 1,039,378 15,037,262	61.0 71.7 77.6 83.1	814,865 7,156,290 299,830 3,050,238	600,805 4,213,642 203,867 1,116,423	3,055,251 116,533 63,875	840,007 5,680,370 142,047 1,239,432
Los Angeles & Salt LakeNov. St. Joseph & Grand IslandNov. 11 mos.	1,247 1,247 2558 258	13,234,303 222,005 2,741,518	2,659.375 3.303 49,594	1,343,345 17,510,622 233,659 2,911,432	2,569,594 18,719 507,926	2,648,817 27,765 364,043	65,351 773,337 3,369 37,650	5,719,300 80,228 952,602	77,008 919,349 16,215 189,268	949,794 13,207,119 146,296 2,065,254	70.7 75.4 62.6 70.9	393,551 4,303,503 87,363 846,178	2,670,009 76,687 678,311	135,629 1,266,705 55,375 370,494	2,159,015 63,665 647,619
Utah         .Nov.           Virginian         .11 mos.           11 mos.         .11 mos.	111 111 608 591	175,143 1,152,137 1,035,796 13,235,088	9,436	175,347 1,157,131 1,101,821 14,164,050	19,753 165,526 120,811 1,397,320	26,577 294,947 221,514 2,546,823	321 4,022 16,213 181,082	36,640 267,336 225,195 3,015,556	6,045 64,166 33,420 356,615	89,313 795,018 616,358 7,492,238	50.9 68.7 55.9 52.9	86,034 362,113 485,463 6,671,812	70,157 266,100 340,462 4,956,740	53,261 124,820 430,111 5,795,301	53,763 191,705 594,199 6,699,467
Wabash			ZZZZ	ot yet filed of yet filed of yet filed of yet filed								•			
Western Maryland	891 1,051 1,051	1,068,762 12,895,875 919,262 10,239,273	6,952 114,340 29,134 739,003	1,146,898 13,712,414 1,009,657 11,979,956	1,848,416 1,848,416 131,357 2,011,135	197,794 2,390,926 157,363 2,057,259	41,096 485,439 64,905 738,338	3,715,993 444,713 5,023,750	40,105 455,694 46,894 523,568	719,605 8,942,665 848,221 10,604,172	62.7 65.2 88.5 88.5	4,769,749 161,436 1,375,784	372,293 3,954,749 71,942 355,945	357,044 3,995,860 49,809 276,979	374,652 4,850,247 293,089 1,941,126
Wheeling & Lake Erie	5111 203 203	659,017 10,193,231 44,993 587,233	5,157 96,523 62 953	707,460 10,967,239 46,686 608,950	63,061 1,355,404 9,264 116,675	222,678 2,836,886 7,496 90,060	34,683 379,894 1,779 26,043	285,838 3,659,751 15,434 193,288	37,795 444,663 3,089 37,467	644,085 8,684,507 36,529 458,668	91.0 79.2 78.24 75.32	2,282,732 10,157 150,282	2,932 1,192,995 102,803	7,278 1,141,137 2,544 58,726	135,664 3,082,285 115,794